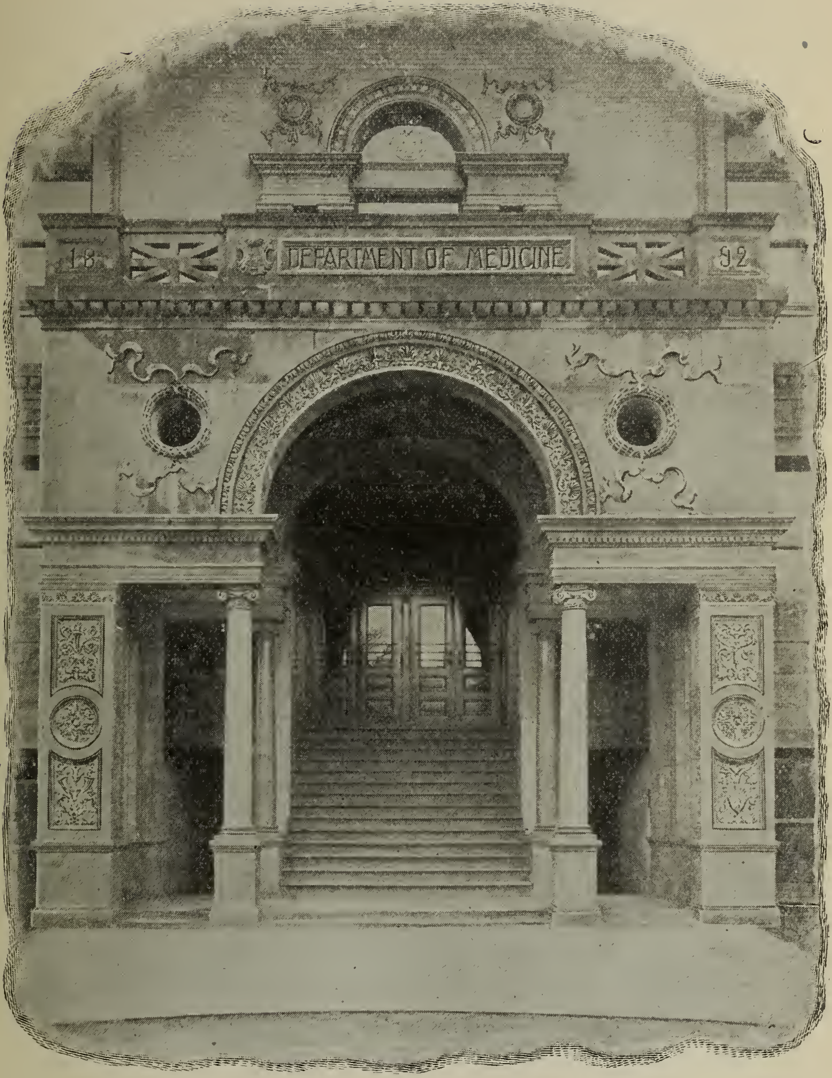
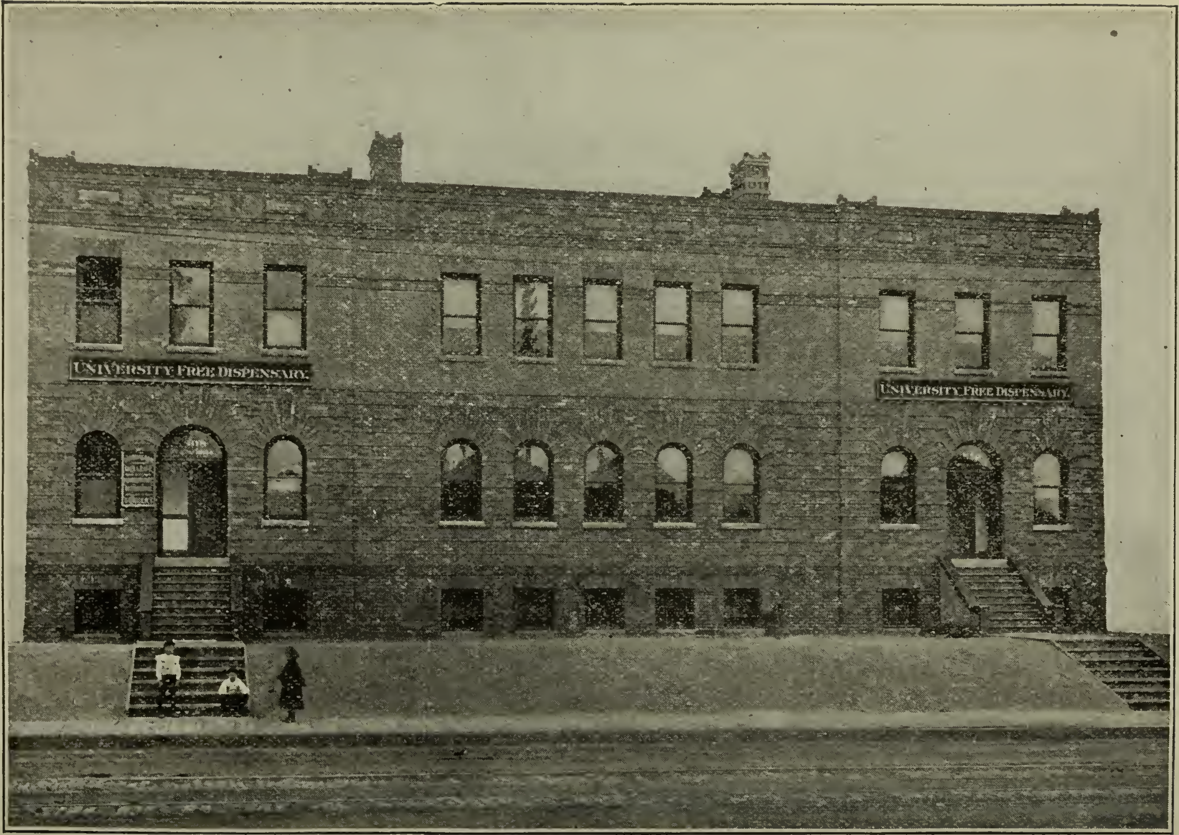
C
M66uZme
1901/02'



Medical Hall.



DISPENSARY BUILDING.

The University

THE UNIVERSITY OF MINNESOTA comprises the following named colleges, schools and departments:

THE GRADUATE DEPARTMENT.
THE COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.
    The School of Technical and Applied Chemistry.
THE COLLEGE OF ENGINEERING AND THE MECHANIC ARTS.
THE SCHOOL OF MINES.
THE COLLEGE OF AGRICULTURE.
    The School of Agriculture.
    The Dairy School.
THE COLLEGE OF LAW.
THE DEPARTMENT OF MEDICINE, composed of colleges as follows:
    The College of Medicine and Surgery.
    The College of Homeopathic Medicine and Surgery.
    The College of Dentistry.
    The College of Pharmacy.
The Regents of the University have also entrusted to their charge
    THE EXPERIMENT STATION;
    THE GEOLOGICAL AND NATURAL HISTORY SURVEY.

THE GRADUATE DEPARTMENT. In each of the colleges, except that of medicine, there are advanced courses of study leading to second degrees. These courses are open to graduates of any reputable college upon presentation of diploma.

In the COLLEGE OF SCIENCE, LITERATURE AND THE ARTS there are four four-year courses of study, the classical, scientific, literary and civic. The classical course offers for its leading studies the Greek and Latin languages; the scientific course, the natural and physical sciences; the literary course, the modern languages; the civic course, history and economics. The completion of the courses leads respectively to the degrees: bachelor of arts, bachelor of science, bachelor of literature, and bachelor of philosophy. The advanced degrees offered in this college are: master of arts, science, literature and philosophy, and doctor of philosophy.

The School of Technical and Applied Chemistry, leading to the degree of bachelor of science, is also organized as a part of this college.

A Summer School for Teachers. A four weeks' course of instruction is offered, in various University subjects, for those whose school duties prevent them from taking the regular University courses.

THE COLLEGE OF ENGINEERING AND THE MECHANIC ARTS offers courses of study, of four years each, in civil, mechanical and electrical engineering; leading to the degrees of civil, mechanical and electrical engineer. This college offers a four years' course of study in science and technology leading to the degree of bachelor of science, with an additional year leading to the engineer's degree in the various lines offered in the college. This college also offers graduate work leading to the degree master of science.

THE SCHOOL OF MINES offers a four years' course of study in mining and metallurgy; upon the completion of which the degrees engineer of mines and metallurgical engineer are conferred.

THE COLLEGE OF AGRICULTURE offers a regular course in agriculture of four years college work; the degree of bachelor of agriculture is conferred on completion of the course.

THE SCHOOL OF AGRICULTURE is open to both men and women, and is a training school for practical farm life and in domestic economy. The college of agriculture is open to graduates of this school.

A Dairy School offers practical instruction in dairying to those who have had some experience in conducting a dairy.

THE COLLEGE OF LAW offers a three years' course of instruction, leading to the degree of bachelor of laws. There is an evening class in this college leading to the same degree. This college offers graduate work leading to the degrees, master of laws, and doctor of civil law.

THE COLLEGE OF MEDICINE AND SURGERY and THE COLLEGE OF HOMEOPATHIC MEDICINE AND SURGERY each offers a four years' course of study, of eight and one-half months each. Upon completion of the prescribed course the degree, doctor of medicine is conferred.

THE COLLEGE OF DENTISTRY offers a three years' course of study of nine months each; upon completion of the prescribed course the degree of doctor of dental medicine is conferred.

THE COLLEGE OF PHARMACY offers a two or three years' course of study, leading to the degree of pharmaceutical chemist. This college also offers graduate work leading to the degrees, master of pharmacy, and doctor of pharmacy.

SPECIAL COURSES. In each of the colleges, students, of an advanced age and adequate preparation, are permitted to pursue, under the direction of the faculty, one or two distinct lines of study.

Bulletins of any department sent free to any address, upon application. The full catalogue will be sent only upon receipt of ten cents to cover postage. Address, THE REGISTRAR,

University of Minnesota,

Minneapolis, Minn.

Board of Regents

The HON. JOHN S. PILLSBURY, MINNEAPOLIS,	*Regent for Life*
CYRUS NORTHROP, LL. D., MINNEAPOLIS, The President of the University.	*Ex-Officio*
The HON. SAMUEL R. VAN SANT, WINONA, The Governor of the State.	*Ex-Officio*
The HON. JOHN W. OLSON, ALBERT LEA, The State Superintendent of Public Instruction.	*Ex-Officio*
The HON. ELMER E. ADAMS, B. A., FERGUS FALLS,	1902
The HON. THOMAS WILSON, ST. PAUL,	1903
The HON. WILLIAM M. LIGGETT, BENSON,	1903
The HON. A. E. RICE, WILLMAR,	1903
The HON. GREENLEAF CLARK, M. A., ST. PAUL,	1904
The HON. SAMUEL G. SMITH, PH. D., LL. D., ST. PAUL,	1904
The HON. STEPHEN MAHONEY, B. A., MINNEAPOLIS,	1907
The HON. O. C. STRICKLER, M. D., NEW ULM,	1907
The HON. JAMES T. WYMAN, MINNEAPOLIS,	1907

OFFICERS

The HON. JOHN S. PILLSBURY, *President.*

PRESIDENT CYRUS NORTHROP, LL. D., *Corresponding Secretary.*

STEPHEN MAHONEY, B. A., *Recording Secretary.*

ST. ANTHONY FALLS BANK, *Treasurer.*

Calendar.

FIRST SEMESTER.

SEPTEMBER	17th.	Registration and assignment of seats. Entrance examinations, 9 a. m. and 2 p. m.
	18th.	Entrance examinations, 9 a. m. Examinations for conditions and advanced standing, 9 a.m. and 2 p.m.
	19th.	Entrance examinations, 9 a. m. Examinations for conditions and advanced standing, 9 a.m. and 2 p.m.
	21st and 23rd.	Classification of students.
	23rd.	Opening lecture.
	24th.	Lectures and laboratory courses begin.
NOVEMBER	30th.	Thanksgiving Day.
DECEMBER	21st.	Holiday vacation begins.
	25th.	Christmas Day.
JANUARY	1st.	New Year's Day.
	8th.	Work resumed.
	27th.	First semester ends.
	20th to Feb. 1st.	Examinations in first, second and third year branches

SECOND SEMESTER.

FEBRUARY	4th.	Second semester begins.
	12th.	Lincoln's Birthday—Holiday.
	22d.	Washington's Birthday—Holiday.
MAY	17th.	Second semester ends.
	19th.	Final examination begins.
	29th.	Memorial Day.
	30th.	Annual meeting of the faculty.

COMMENCEMENT WEEK.

SUNDAY,	June 1st.	Baccalaureate Service, - - - - -	3:00 p. m.
MONDAY,	June 2nd.	Senior Class Exercises—Announcement by the class.	
WEDNESDAY,	June 4th.	Alumni Day.	
THURSDAY,	June 5th.	Commencement Day—The Thirtieth Annual Commencement.	
		Graduation Exercises, - - - - - -	9:00 a. m.
		Alumni Banquet and President's Reception, -	1:00 p. m.
FRIDAY,	June 6th.	Summer Vacation Begins.	

College of Medicine and Surgery.

THE FACULTY.

Cyrus Northrop, LL. D., *President.*
Parks Ritchie, M. D., *Dean and Professor of Obstetrics.*
Thomas G. Lee, B. S.. M. D., *Professor of Histology and Embryology and Librarian.*
Charles A. Erdmann, M. D., *Professor of Anatomy.*
Richard Olding Beard, M. D., *Secretary and Professor of Physiology.*
Charles John Bell. B. A., *Professor of Chemistry.*
Henry Martyn Bracken, M. D., L. R. C. S., Edin., *Professor of Materia Medica and Therapeutics.*
Frank Fairchild Wesbrook, M. A., M. D., C. M., *Professor of Pathology and Bacteriology.*
Charles H. Hunter, A. M., M. D., *Professor of the Theory and Practice of Medicine.*
Everton J. Abbott, A. B., M. D., *Associate Professor of Practice and Professor of Clinical Medicine.*
J. W. Bell, M. D., *Professor of Physical Diagnosis and Clinical Medicine.*
Charles Lyman Greene, M. D., *Clinical Professor of Medicine and of Physical Diagnosis.*
Henry L. Staples, A. M., M. D., *Professor of Clinical Medicine.*
Charles A. Wheaton, M. D., *Professor of Clinical Surgery.*
Frederick A. Dunsmoor, M. *D.*, *Professor of Operative and Clinical Surgery.*
James H. Dunn, M. D., *Professor of Surgery.*
James E. Moore, M. D., *Professor of Clinical Surgery.*
J. Clark Stewart, B. S., M. D., *Professor of Principles of Surgery.*
Justus Ohage, M. D., *Professor of Clinical Surgery.*
Arthur J. Gillette, M. D., *Professor of Orthopedic Surgery.*
A. B. Cates, A. M., M. D., *Clinical Professor of Obstetrics.*
Alex J. Stone, M. D., LL. D., *Professor of Diseases of Women.*
Amos W. Abbott, M. D., *Clinical Professor of Diseases of Women.*
A. McLaren, A. B., M. D., *Clinical Professor of Diseases of Women.*
John F. Fulton, Ph. D., M. D., *Professor of Ophthalmology and Otology.*
Frank C. Todd, M. D., *Clinical Professor of Ophthalmology and Otology.*
C. Eugene Riggs, A. M., M. D., *Professor of Nervous and Mental Diseases.*
W. A. Jones, M. D., *Clinical Professor of Nervous and Mental Diseases.*
Thos. S. Roberts, M. D., *Professor of Diseases of Children.*
Max P. Vander Horck, M. D., *Professor of Diseases of the Skin and of the Genito-urinary System.*
W. S. Laton, M. D., *Professor of Diseases of the Nose and Throat.*
Arthur Sweeney, M. D., *Professor of Medical Jurisprudence.*

CORPS OF CLINICAL PROFESSORS AND INSTRUCTORS.

J. E. Schadle, M. D., *Clinical Professor of Diseases of the Nose and Throat.*
Burnside Foster, M. A., M. D., *Clinical Professor of Diseases of the Skin and Lecturer upon History of Medicine.*
James T. Christison, M. D., *Clinical Professor of Diseases of Children.*
C. Nothnagel, M. D., *Clinical Professor of Medicine.*
John T. Rogers. M. D., *Clinical Instructor in Surgery.*
Herbert W. Davis, M. D., *Clinical Instructor in Obstetrics.*
George M. Coon, M. D., *Clinical Instructor in Genito-Urinary Diseases.*

L. A. Nippert, M. D., *Clinical Instructor in Medicine.*
Andrew M. Henderson, M. D., *Clinical Instructor in Medicine*
J. L. Rothrock, M. D., *Clinical Instructor in Pathology.*
L. B. Wilson, M. D., *Senior Demonstrator of Pathology.*
S. M. White, B. S., M. D., *Assistant Professor of Pathology and Bacteriology.*
George D. Head, B. S., M. D., *Instructor in Pathology and Clinical Microscopy.*
H. C. Carel, B. S., *Assistant Professor of Chemistry.*
Winfield S. Nickerson, Sc. D., *Assistant Professor of Histology.*
Margaret L. Nickerson, M. A., *Instructor in Histology.*
M. Russell Wilcox, M. D., *Demonstrator in Physiology.*
Eleanor M. Wilkinson, *Instructor in Dietetics.*
J. Warren Little, M. D., *Clinical Instructor in Surgery.*
Geo. E Senkler, M. D., *Clinical Instructor in Physical Diagnosis.*
A. W. Dunning. M. D., *Clinical Instructor in Nervous and Mental Diseases.*
Frederick Leavitt, M. D., *Clinical Instructor in Obstetrics.*
A. E. Benjamin, M. D., *Clinical Instructor in Gynecology.*
Haldor Sneve, M. D , *Lecturer in Mechano-Therapy.*
H. K. Read, M. D., *Demonstrator of Anatomy.*
F. A. Kiehle, A. B.. M. D., *Instructor in Medical Latin.*

CLINICAL AND LABORATORY ASSISTANTS.

J. P. Barber. M, D., *Assistant in Diseases of Children.*
F. P. Wright, M. D., *Assistant in Surgery and Dermatology.*
A. A. Law, M. D., *Assistant in Surgery.*
A. T. Mann, M. D. *Assistant in Surgery.*
F. C. Davis, M. D., *Assistant in Surgery.*
Judd Goodrich, M. D , *Assistant in Surgery.*
Warren Dennis, M. D. *Assistant in Surgery.*
A. R. Colvin, M. D., *Assistant in Surgery.*
C. D. Harrington, M. D., *Assistant in Surgery.*
R. A. Campbell, M. D., *Assistant in Diseases of the Nose and Throat.*
Charles R. Ball, M. D., *Assistant in Nervous and Mental Diseases.*
Harry P. Ritchie, Ph. B., M. D., *Assistant in Gynecology.*
E. F. Reamer, M. D., *Assistant in Ophthalmology and Otology.*
E. V. Appleby, M. D., *Assistant in Ophthalmology and Otology.*
J. C. Litzenberg, M. D., *Assistant in Ophthalmology and Otology.*
Walter Ramsey, M. D., *Assistant in Medicine.*
David Lando, M. D., *Assistant in Medicine.*
E. R. Hare, M. D.. *Prosector in Anatomy.*
W. H. Condit, M. D.. *Assistant in Materia Medica.*
L. H. Fligman, M. D,, *Assistant in Physiology,*

UNIVERSITY SCHOLARS.

GIVING INSTRUCTION AND ASSISTING IN LABORATORIES.

In Anatomy—C. F. Ewing, H. R. Jones, R, E. Mitchell, H. F. McGuigan.
In Histology and Embryology—Eugene K. Green, Herbert Coulter, Harris D. Newkirk.
In Bacteriology and Pathology—J. C. Ferguson, Catherine E. Putnam, John M. Armstrong Chelsea Pratt.
In Dispensary—E. G. Strout, H. H. Hazeltine, Mary F. Hopkins.
In Materia Medica—H. H. Hazeltine.
In Surgical Pathology—E. Hessel Beckman.

The Department of Medicine.

THE DEPARTMENT OF MEDICINE INCLUDES THE FOLLOWING NAMED COLLEGES:

The College of Medicine and Surgery.
The College of Homeopathic Medicine and Surgery.
The College of Dentistry.
The College of Pharmacy.

Each college is distinct in the government of its internal affairs, has its own faculty and an independent curriculum, excepting in the studies of anatomy, physiology, chemistry, histology and embryology. These studies, so far as they are required in each course, are pursued by all the students of the department in common.

BUILDINGS AND EQUIPMENT.

The department is resident in four buildings situated upon the University campus, viz: Medical hall, the laboratory of medical sciences, the laboratory of chemistry and the laboratory of anatomy.

Medical hall contains the offices of the deans of the college of medicine and surgery, of the college of homeopathic medicine and surgery and of the college of dentistry; the large amphitheatre and lecture rooms of the several colleges, the library and reading room of the department, the laboratories of anatomy and materia medica, the operating-rooms and laboratories of dentistry and the dental infirmary.

The laboratory of medical sciences is a building especially designed for laboratory uses. One wing of the building is occupied by the college of pharmacy and the department of physiology. It contains the office and private laboratory of the dean of the college of pharmacy, the pharmaceutical and botanical laboratories. the laboratory of organic chemistry, with preparation and stock rooms. The office of the secretary of the college of medicine and surgery, a large lecture amphitheatre, especially arranged for demonstrative work, the laboratories of physiology, physiologic chemistry, practical dietetics, and operative surgery are also situated in this wing.

The center and opposite wing are occupied by the departments of histology and embryology, pathology and bacteriology. Each of these branches has its well-lighted laboratories, preparation-rooms and private study rooms.

Upon the basement floor are laboratory stock-rooms and the animal rooms devoted to physiologic and bacteriologic purposes.

A large laboratory upon the first floor is assigned to the bacteriological work of the State Board of Health.

The laboratory of chemistry is a one-story brick building devoted entirely to the use of this department. It is equipped with amphitheatre laboratories, preparation-rooms, store-rooms, and the private offices of the professor and assistant professor of chemistry.

The laboratory of anatomy is a new two-story and basement building, 35x60 feet. In the basement are the morgue, injecting room, cold storage vaults and engine and apparatus for the carbon dioxide freezing plant. On the first floor are an amphitheatre seating one hundred students, the private offices of the professors and instructors, a private dissecting room and a small laboratory for research work. The entire second floor is devoted to laboratories for practical work in anatomy.

A clinical building has been recently erected and equipped. It is situated in a part of the city most favorable to the development of an out door service and, at the same time, accessible to the students. It is of two-stories and covers 40x150 feet. It affords ample floor space for amphitheatres, waiting rooms, pharmacy and class-rooms for each of the clinical branches. Wards and laboratories, in which section work in medical and surgical diagnosis can be conducted, have been equipped.

The department of medicine is in intimate relationship, through its several faculties, with the hospitals, infirmaries and dispensaries of the cities of Minneapolis and St. Paul. Through these agencies it utilizes, for the benefit of its students, the clinical material of these two large centers of population. The location of the University near the interurban car line enhances the value and convenience of these clinical opportunities.

A medical library, containing some twenty-four hundred volumes and supplied with current periodicals, is open to all the students of the department. The collection has been chosen with special regard to the need for reference work and collateral reading. The general library of the University and the public and medical libraries of Minneapolis and St. Paul are also open to the students of this department.

The College of Medicine and Surgery.

RULES AND REGULATIONS OF THE DEPARTMENT.

COLLEGE YEAR.

The fourteenth annual course of study in this department will begin on September 17th, 1901, and will continue eight and one-half months, closing upon the first Thursday in June, 1902. The college of dentistry, in this department, will begin work on September 11th and the college of pharmacy October 2nd.

The college year is divided into semesters; the first semester ending January 25th, 1902. The succeeding week will be devoted to mid-year examinations which will be conducted in many of the departments. The second semester will begin February 4th, 1902, and will close May 17th, 1902 when the final examinations of the year will begin. Commencement exercises will occur in common with the other departments of the University, during the week ending June 2nd 1902.

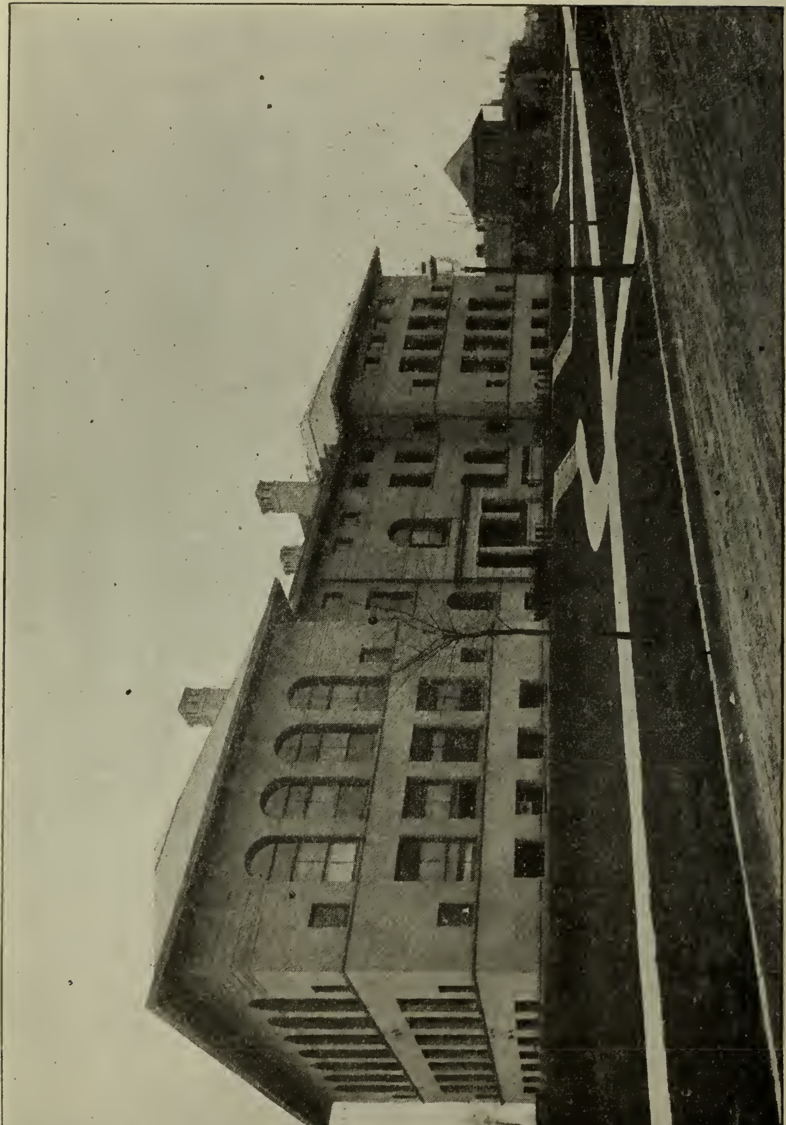
ENROLLMENT.

It is desirable that students matriculate before September 10th.

Students will be assigned seats in the order of and at the time of their matriculation. Such matriculation and assignment of seats will be had in the office of the registrar of the University. Students will then present themselves for entrance examination, or for the approval of their evidences of preliminary qualification, to a committee of the college of science, literature and the arts appointed for this purpose. Having received an entrance certificate from this committee they will report to the dean of the college which they desire to enter, for admission and classification. They will then be furnished with a record of their standing and of the studies to be taken and they will be required to present this record to the professors in charge of such studies within the first week of the term.

ENTRANCE EXAMINATIONS.

In accordance with an agreement between the University of Minnesota and Hamline University, the requirements for admission to their medical departments, which represent all the medical schools of the state, are, at present, uniform.



Laboratory of Medical Sciences.

During the session of 1901-02 students will be admitted to this college upon passing the regular entrance examinations to the colleges of science, literature and the arts, as unified by the presidents of the University of Minnesota and Hamline University. The subjects of examination are:

English composition and rhetoric, one year.
Physics, one year.
Physiology, elementary course.
United States history, one year.
History of Greece and Rome, one-half year.
Algebra, elementary, one year.
Geometry, plane, one year.

Latin Grammar, one year: Cæsar, four books; Cicero, four orations Vergil, four books.

German or French, two years, or one year of each, will be accepted in lieu of Cicero and Vergil.

Graduates of any Minnesota State high school will be admitted **without examination, provided—**

(1) That the school maintain a **full four-year course** of high school work.

(2) That the applicant present to the dean the principal's certificate showing the satisfactory completion **of all the studies required for admission.**

(3) No student will be admitted **if conditioned in more than two subjects.**

Graduates of the **advanced courses of Minnesota Normal Schools** will be admitted upon the same terms as graduates of State high schools. Any Minnesota high school or academy **not under supervision of the State High School Board,** but requiring for graduation **a four-years' course,** exclusive of the common school branches, conforming **essentially in distribution of time** to the entrance requirements of this college, **may be accredited by the faculty** in all respects as are the State high schools.

Graduates from schools in other states, whose diplomas admit to **reputable colleges,** will be received, subject to the regulations that apply to graduates of Minnesota State high schools.

N. B.—Notice is given that in the session of 1902-3 the requirements for admission to this college will be those for admission to the sophomore class of the college of science, literature and the arts, and that in the session of 1903-4 they will be those for admission to the junior class of said college.

CONDITIONS.

Examinations of conditioned students and of applicants for advanced standing, in the common studies of the first and second years, will be held in these branches upon the following dates:

September 19, 9 a. m.	Anatomy, first year;	Physiology, second year.
September 19, 2 p. m.	Histology, first year;	Chemistry, second year.
September 20, 9 a. m.	Physiology, first year;	Anatomy, second year.
September 20, 2 p. m.	Chemistry, first year;	Histology, second year.

Conditions may also be removed at the close of each semester.

No student will be eligible to final examinations in any year who carries conditions of a previous year unremoved.

No student will be admitted to the fourth year who is conditioned in any of the studies of the first and second years.

Students who carry conditions into a succeeding year may find a resultant conflict of study hours. In that event they will give preference to the unfinished studies of the lower conflicting course.

CLASSIFICATION.

September 21st and 23rd will be devoted to the classification of students. The opening lecture of the course will be delivered at 8 p. m., September 23rd.

STANDING.

The standing of students is determined by the results of recitations, written examinations and laboratory work. It is indicated by the terms "passed" or "conditioned." Conditions may be removed as indicated above. Incomplete work must be made up before the final examinations of the following year.

Students must pass a majority of the studies of their year in order to classify in the next succeeding year.

In the studies of the first and second years, the classes will recite in sections during hours regularly assigned for this purpose.

Habitual absence without a satisfactory excuse, continued indifference to study, or persistently poor scholarship may subject the student to temporary or permanent suspension.

ADVANCED STANDING.

Applicants for advanced standing must pass the entrance examinations, or present the usual equivalents. They must furnish satisfactory evidence of time spent and subjects covered in previous professional studies and must present themselves at the above dates and pass the examinations in all branches in which they wish to be exempt, excepting under the conditions of collegiate study stated below.

No conditions of advanced standing will entitle the student to take the two years of any graded study coincidently.

Students will not be permitted to substitute private work in any branch for the regular college course work, excepting in the case of actual laboratory exercises done under the direct supervision of an instructor appointed by the chair and approved by the faculty. Examinations in such private laboratory work will be conducted by the chair. This rule does not apply to conditioned students.

Seniors in the college of science, literature and the arts, who contemplate entering the department of medicine, are permitted to elect courses in anatomy, histology and embryology, physiology and chemistry in this department in lieu of similar science courses in the college of science, literature and the arts. Since the medical practice act of this State requires four full years of medical study, these students are encouraged to elect this work in the department of medicine. This election will be contributive toward the degrees given in both colleges. Reciprocally, however, the college of medicine and surgery will accept full courses, taken in the college of science, literature and the arts, in histology and embryology, physiology and chemistry in lieu of its first year's work in these branches.

For a statement of fees, either charged or credited in these elected studies, see below.

ATTENDANCE.

Students are required to attend four-fifths of the lectures in each course. This rule is not intended for the benefit of those who seek admission after the opening of the college year, but is designed to cover cases of sickness or unavoidable absence. It does not apply to laboratory courses which must be taken in full and must be entered, invariably, during the first week in which they begin.

TERMS OF TUITION.

The college of medicine and surgery has adopted a system of annual fees, in which are included all charges for matriculation, lecture courses, laboratory courses, dissections and graduation, except a rental fee for microscopes.* These fees are $100 per annum for the full course.

One-half of the annual fee will be payable when the student matriculates. The registrar's receipt for this portion of the fee will entitle the holder to take the entrance examinations and to classify. The second half will be payable at the opening of the second semester, February 4th, 1902. If the applicant fails to pass the entrance examinations, his fees will be returned by the registrar. Absence or failure to continue study will not entitle the student to return of fees, excepting in cases of special hardship, when application may be made to the executive committee of the Board of Regents.

A student who takes advanced standing will receive only a credit of five dollars upon his annual fee per semester of each laboratory course from which he may be exempt.

Senior students in the academic department of this University who elect first year studies in this college, during their senior academic year, will be admitted to each of such studies upon payment of a fee of fifteen dollars.

Students who are conditioned and fail to remove their conditions within one year will be charged an extra examination fee.

Senior conditioned students who re-enter for work in any succeeding year will be charged a matriculation fee of ten dollars.

BREAKAGE AND LOSS.

In each laboratory course the student will be assigned a certain amount of apparatus and material, for which he will give a receipt.

In each semester a fee of $2.00 will be charged for the rental of a microscope in each course in which its use is required, provided the student is not supplied with a satisfactory instrument of his own. It is an advantage for the student to possess a microscope.

For apparatus and material attaching to his laboratory desk he will also be held responsible. At the end of each course, if such apparatus and material are restored in good condition, this receipt will be returned to him.

A deposit of five dollars will be made with the Registrar each year, by every student, at the time of enrollment, as *a caution fee.* This fee is intended to cover the cost of unnecessary damage in the college buildings and of breakage and loss of laborotory apparatus and materials. It will be returned to the student at the close of each year, minus the cost of articles assigned to him, which are not returned in good condition, or of damage to college property for which he is individually responsible. If responsibility for such damage cannot be individually fixed, a pro rata charge upon all students will be made.

SPECIAL STUDENTS.

Special students will pay to the registrar a fee of twenty dollars per year for each study they elect to pursue. They will be charged fees, varying from five to twenty dollars, for each laboratory course they may enter.

Graduate students will pay an admission fee of ten dollars which will entitle them to attend any lectures they may desire in regular courses.

CURRICULUM.

The course in the college of medicine and surgery leads to the degree of doctor of medicine. It covers a period of four years of collegiate study, each year representing eight and one-half months in actual residence.

The studies are graded, so far as practicable, throughout the four years and this grading is arranged with careful reference to the relation which the subjects naturally bear to each other.

The work of the first two years deals with the so-called scientific or laboratory branches; while that of the last two years includes the principles and practice of medicine and surgery, their associated specialties and the application of scientific or laboratory methods to clinical experience.

GRADED SYSTEM OF STUDY.

FIRST YEAR.

Histology and embryology, anatomy, physiology, chemistry.

SECOND YEAR.

Histology and embryology, anatomy, physiology, chemistry, materia medica.

THIRD YEAR.

Surgical anatomy, pathology, bacteriology, clinical microscopy, surgical pathology, operative surgery, practice of surgery, practice of medicine, obstetrics, physical diagnosis therapeutics.

FOURTH YEAR.

Practice of surgery, practice of medicine, clinical obstetrics, surgical pathology, practical physical diagnosis, nervous and mental diseases, gynecology, ophthalmology and otology, diseases of children, genito-urinary diseases, orthopædia, diseases of the skin, diseases of the nose and throat, hygiene.

ELECTIVE COURSES.

The following subjects, arranged in the fourth year, are electives: Operative surgery, therapeutics, practical dietetics, case-taking and life insurance, history of medicine, mechano-therapy and medical jurisprudence.

Senior students are required to elect three of these courses. They will be required to complete and to pass satisfactory examinations upon the subjects elected. The remaining subjects, with the exception of practical dietetics, they may follow at their pleasure, without required examination.

COURSES OF INSTRUCTION.

HISTOLOGY AND EMBRYOLOGY.

The laboratory of histology and embryology occupies most of the first floor and portions of the third floor and basement of the laboratory of medical sciences.

The general laboratory, 44x72 feet, extends across the north wing and is abundantly lighted by large windows on three sides and part of the fourth. Study tables accommodating seventy students are placed directly under the windows. A second tier of desks provides for twenty other students. Each student is provided with a separate locker for the storage of apparatus and material. The special laboratory, 24x35 feet, for research work by advanced students, adjoins the general laboratory. The next apartment, the library of the laboratory, contains a reference library consisting of a small but carefully selected collection of related literature, both standard and periodical. In addition to the laboratory library, the other libraries of the University, together with the public libraries of Minneapolis and St. Paul, afford the student access to the best publications among current periodicals and monographs. The rooms across the hall are devoted to the office and private laboratories of the professor and his assistant. On the third floor are located a preparation room, a small laboratory for special students, a dark room, a room for copying and enlarging, and a laboratory for photomicrography and projection. In the museum on this floor are several cases containg series of embryos and histologic specimens. In the well-lighted basement are found a preparation room, 20x35 feet, for the hardening of tissues, &c., and an experimental laboratory and store room, 26x36 feet.

These laboratories are equipped with seventy-five Leitz' microscopes, each fitted with nosepiece and Abbé condenser, various forms of microtomes, such as freezing, Thoma, Minot, Schanze, &c., injection apparatus, aquaria, thermostats, incubators, water baths, chemical hoods, a great variety of technical glassware, Grübler's stains, a set of His' wax models, photomicrographic and reconstruction apparatus, charts, reference cabinets containing carefully selected slides, a large collection of hardened histological and embryological material with an abundant supply of fresh tissues.

The courses are made as practical as possible, beginning with the technique of the microscope, followed by the preparation of permanent specimens. Collections of typical specimens, also, will be loaned to the students for study. During the two years course the student will acquire a valuable collection of slides of his own preparation illustrating the structure and development of the human body.

The course is illustrated by charts and lantern-slides of histological and embryological specimens. Demonstrations are given under the microscope of typical sections of tissues and organs, accompanied by camera lucida drawings, or photo-micrographs, with explanatory text.

All students are recommended to purchase a microscope at the beginning of their medical course. This instrument is an indispensable part of the outfit of a well-trained physician. Suitable microscopes can be purchased at from $50 to $60, which may be fitted at any time with such other parts as may be desired.

Students not owning microscopes will be furnished with instruments at a rental of $2 per semester for each course requiring the use a microscope.

Course I. General morphology and histology.

Lectures, demonstrations and laboratory work. The course includes the structure and manipulation of the microscope, the structure and properties of protoplasm; the cell, its structure; cell division and reproduction, A detailed study of the structure and life history of certain typical unicellar animal and plant forms and of certain multicellar forms, leading to the consideration of the elements of structure in the vertebrata. A comparative study of the histology of the blood, of the epithelial, connective, muscular and nervous tissues and of the vascular and lymphatic systems. Lectures, etc., 2 hours a week. Laboratory work, 6 hours a week, 1st semester, 1st year·

PROFESSORS LEE AND NICKERSON AND M. L. NICKERSON.

Course II. Elements of embryology and histogenesis.

Lectures, demonstrations and laboratory work. A comparative study of reproduction; the ovum, the spermatozoon, fertilization, cleavage, formation of blastodermic layers, the formation of the embryo, foetal envelopes, etc., with practical work on chick and frog embryos. The differentiation and histo-genesis of the tissues, etc. Lectures, etc., 2 hours a week; laboratory work, 6 hours a week, 2d semester, 1st year. Open to those who have completed course i.

PROFESSORS LEE AND NICKERSON AND M. L. NICKERSON.

Course III. Human embryology and microscopic anatomy.

Lectures, demonstrations and laboratory work. Advanced methods of histological and embryological technique, with practical laboratory work. The comparative study of the morphology, microscopic anatomy, origin and development of the various organs of the integumentary, alimentary, respiratory and uro-genital systems, the central and sympathetic nervous systems, the organs of special sense, etc. Lectures, etc., 2 hours a week; laboratory work, 3 hours a week. 1st and 2d semesters, 2d year. Open to those who have completed the courses of 1st year in histology and embryology.

PROFESSORS LEE AND NICKERSON AND M. L. NICKERSON.

The full courses given in histology and embryology of vertebrates in the college of science, literature and the arts will be accepted in lieu of the first year's work in histology and embryology, in the department of medicine. See statement of fees, page 18.

The following courses are open to properly qualified students, and will consist of practical work in the laboratory, a prescribed course of reading, with reports of work, and of lectures and demonstrations to be given from time to time.

Course IV. Methods of microscopical work.

The preparation and use of the various solutions employed in fixing, hardening and staining; methods of embedding, sectioning, reconstruction, etc.

Course V. (*a*) *Comparative histology and histogenesis of tissues.*

The animal cell, the epithelial, connective, muscular and nervous tissues, blood, etc.

(*b*) *Comparative histology and embryology of the viscera.* The epidermal, digestive, respiratory and uro-genital systems of organs.

(*c*) *Comparative histology and histogenesis of the nervous system and sense organs.* Central nervous system, etc., after the methods of Weigert, Golgi, etc.

Course VI. Comparative embryology of vertebrates.

A detailed study of the various stages in the development of vertebrate types, as acanthias, petromyzon, trout, amblystoma, frog, chick, rat, pig and human embryos.

Research work in histology and embryology.

Opportunity will be offered for those desiring to pursue original investigations.

ANATOMY.

The department of anatomy occupies a separate building, adapted to its work and equipped with the best modern appliances. It includes two large students' dissecting rooms, the general laboratories of anatomy, a bone laboratory for bone research work, the offices of the professor and demonstrator of anatomy, preparation rooms, morgue and anatomical museum, to which has been added a complete series of casts from His' frozen sections. An ample supply of dissecting material is provided.

The bones of the human skeleton are furnished to the student for purposes of study and recitations from the specimen are conducted by the demonstrator of anatomy.

A series of lectures upon syndesmology and angiology follows, accompanied by recitations, which are illustrated by human preparations and by fresh and preserved sections of joints.

A course of descriptive lectures in myology is then given, with demonstrations upon the cadaver.

Lectures and a brief course of dissections of the abdominal and thoracic viscera of the lower animal complete the work of the first year in this branch.

In the second year, the student takes lectures, recitations and demonstrations upon the vascular system, the alimentary canal, the respiratory tract, the genito-urinary system and the inguinal and perineal structures. He then pursues a course in regional anatomy, embracing a study of the surgical regions of the entire body; a course in the anatomy of the eye and ear and of the brain, spinal cord and ganglionic system, illustrated by fresh and permanent preparations, models and diagrams.

He dissects, during the year, the entire human body, recites upon the subject and observes demonstrations made by a corps of assistants under the direction of the demonstrator of anatomy.

In the third year, the student takes up the study of the human body from a topographical standpoint and is given a thorough review of the surgical regions, emphasizing the practical points in the relations, structure and distribution of the nervous system.

Course I. Osteology.

Lectures and recitations upon the human skeleton and supplementary work on the osteology of domestic mammals; three hours each week, for 10 weeks of first semester. Recitations from the specimen, taken by the class, in sections; 2 hours each section, for 10 weeks, first semester. Required of all first year students.

Course II. Syndesmology.

Lectures, recitations and laboratory demonstrations. 3 hours each week, for 4 weeks, first semester. Open to those who have taken course i.

Course III. Myology and Angiology.

Lectures and recitations, covering the entire muscular and arterial systems of the human body, with a supplementary study of comparative myology; 3 hours each week, 16 weeks. Laboratory work consists in identifying the muscles of the human body on dissected preparations and showing their actions. Class, in sections, 4 hours each week, for 5 weeks. Open to those who have taken course ii.

Course IV. Splanchnology.

Lectures on the thoracic, abdominal and pelvic viscera; 3 hours each week, for 10 weeks. Open to those who have taken course iii. Laboratory work in demonstrating and dissecting the thoracic, abdominal and pelvic organs of the human subject or of the dog or sheep. PROFESSOR ERDMANN.

Semi-weekly recitations upon the subjects of the first year's course, conducted in sections. DR. H. K. READ.

Course V. Splanchnology.

Descriptive and topographical anatomy of the thoracic viscera, the alimentary and urino-genital organs. Lectures and recitations, 3 hours each week, for 10 weeks. Required of second year students.

Course VI. Descriptive surgical anatomy.

for 12 weeks, Open to those who have completed course v.

Course VII. The nervous system.

Cerebro-spinal axis and its membranes; the cranial and spinal nerves; the sympa-
Head, neck, trunk and extremities. Lectures and recitations 3 hours each week,
thetic nervous system, and the special-sense organs. Lectures, recitations and dissections of the brain, 3 hours each week, for 8 weeks. Open to those who have completed course vi. PROFESSOR ERDMANN.

Course VIII. Dissections.

This work extends over two periods of 6 weeks each, requiring five afternoons of each week. The method of work follows that laid down in Holden's Manual of Dissections. DRS. H. K. READ AND E. R. HARE.

The second year lecture and dissecting courses are open to those having completed the first year's work in anatomy and histology.

Weekly recitations, upon the subjects of the second years' course conducted in sections. PROFESSOR ERDMANN

Course IX. Surgical anatomy.

The instruction consists of dissections, demonstrating the relations of structures composing the surgical regions of the body; demonstrations, upon the living subject, showing the anatomical and surgical landmarks and their applications; also the location, by surface tracings, of the viscera contained in the various cavities and of the important arteries, veins and nerves. 1 hour a week, second semester. Required of third year students. PROFESSOR ERDMANN.

Course X. Applied Anatomy of the nervous system.

Elective.

Opportunity is afforded for advanced work in practical anatomy at any time during the college year.

PHYSIOLOGY.

The department of physiology occupies a suite of rooms in the laboratory of medical sciences, including the laboratory of experimental physiology, the laboratory of physiologic chemistry and practical dietetics, a demonstration and recitation room, the laboratory library and the office of the professor in this branch. A large amphitheater, adapted to the demonstration of major experiments, immediately adjoins the physiologic laboratories and is used, also, for lecture purposes by this and other chairs.

In the basement of the laboratory of medical sciences, the chair maintains large and well-equipped animal-rooms, which are furnished with a large aquarium, frog tanks, animal enclosures and breeding cages. From this animal room are furnished supplies of material and animals for the work in experimental physiology, physiologic chemistry, histology, embryology, pathology and bacteriology. The hygienic conditions of the room are studied carefully, with a view to maintaining the physiologic and structural integrity of its animal occupants as perfectly as possible. Stock required for bacteriological purposes is removed and placed in an isolated department at a distance from the room.

The physiologic laboratories are equipped with a full supply of apparatus, instruments, etc., for experimental purposes, and with materials, glassware, digesters, water baths, ventilating hoods, etc., for the work in physiologic chemistry. Their outfit includes sets of vivisection instruments, an artificial respiratory machine, batteries; Du Bois-Reymond coils, galvanometers, rheostats, moist muscle chambers, recording drums, Ludwig's kymograph, spring myograph, Burdon-Sanderson's stethometer, stethoscopes, phonendoscopes, Dudgeon's and Marey's sphygmographs, cardiographs, Runne's chronograph, Roy's tonometer, Gaskell's clamp, oncometers, hæmometers, hæmoglobinometers, hæmatocrits, plethysmograph, etc., etc. They are furnished with motor power for the operation of recording apparatus and for the manufacture of apparatus in the laboratory workshop.

The course in physiology is graded in the first and second years. In the first year, the student hears lectures, recites and attends demonstrations in general physiology. These embrace the discussion and, so far as possible, the observation of the physiologic ingredients of the animal body; the study of the physiology of cell-life, of the fundamental properties of the cell; of the nutritive media, blood, lymph and chyle; of the elementary functions of the nervous system; of the muscular tissues, the connective tissues and the epithelial tissues; of the vascular mechanism; of the alimentary canal; of the organs of secretion, respiration and excretion.

In the second year, the work is made as practical as possible and includes the study of such advanced topics as metabolism, nutrition, dietetics, reproduction; the physiology of foetal life, of infancy, of maturity and of old age; and the functions of the brain, spinal cord and ganglionic system. Three hours each week, during the first semester, are occupied in laboratory work in physiologic chemistry. This course affords the student a practical knowledge of the tissues and fluids of the body from a chemical standpoint. It embraces studies in the several classes of proteids, in fats, carbohydrates, bone, muscle, blood, milk, the digestive fluids, glycogen, etc.

A similar number of hours during the second semester are devoted to experimental physiology. For this work the class is divided into sections and the instruction is individualized so far as possible. The student is familarized with physiologic apparatus and its uses; with forms of electrical stimulation and with methods of experimentation; while his knowledge of physiologic principles is strengthened by the observation of functional facts. Demonstrative work is combined with the individual experiments performed by the pupil.

In the fourth year, an elective course in practical dietetics is conducted during the first semester. It deals with the analysis of foods, with the general principles of food preparation and with the selection of a suitable dietary for the several periods of life.

Practical talks upon the principles and means of food preparation, the serving of food, food selection, invalid and infant dietary, etc., are associated with this course. A trained instructor conducts the exercises in hygienic cooking.

A laboratory reference library is in process of collection, to which the advanced student will have access for collateral reading.

Course I. General physiology.

Lectures, recitations and demonstrations, dealing with the physiologic chemistry of the human body; the physiologic properties of the cell; the nutritive media; the nervous mechanisms in general; the muscular tissues, the connective tissues and the epithelial tissues, as the structural bases of the animal body. Two hours a week, first semester, first year. PROFESSOR BEARD.

Course II. Systemic physiology.

Lectures, recitations and demonstrations. This course includes the physiology of the vascular system; the digestive system; the respiratory system; the secretory and excretory systems. Four hours a week, second semester, first year. Open to those who have completed course i. . PROFESSOR BEARD.

Semi-weekly recitations upon the subjects of the first year are conducted in sections of the class. PROFESSOR BEARD, DRS. M. R. WILCOX AND F. H. FLIGMAN.

Course III, Advanced physiology.

Lectures, recitations and demonstrations. The course includes the discussion of the phenomena of metabolism; of nutrition; of temperature production, regulation and loss; of reproduction; of the physiologic changes incident to successive periods of life, and of the functions of the nervous system. Two hours a week, first semester; three hours a week, second semester, second year. Open to those who have completed the courses in physiology of the first year. PROFESSOR BEARD.

Semi-weekly recitations upon the subjects of this course are conducted in sections of the class. PROFESSOR BEARD AND DR. WILCOX,

Course IV. Physiologic chemistry and microscopy.

Laboratory work. A practical study of the several classes of proteids; of carbohydrates, fats, muscle and bone; of gastric juice, saliva, pancreatic juice and bile in their respective digestions; of glycogen, and of blood, lymph, chyle and milk. Microscopic study of the carbohydrates in vegetable and animal forms; of the physiologic emulsions of fat; of the crystalline waste products; and of the physiologic conditions of the blood-cells and the process of fibrin formation. Practical instruction is given during this course in the enumeration of the blood cells, in the estimation of hæmoglobin and of the corpuscles in mass, in the spectroscopic examination of the blood and in the use of the polariscope. Nine hours a week, first semester, second year. This does not represent the actual number of hours of work done by each student, since, during a part of the session, the class is divided into sections for practical exercises. Open to those who have completed courses i and ii. PROFESSOR BEARD AND DRS. WILCOX AND FLIGMAN.

Course V. Experimental physiology.

Laboratory work and demonstrations. A study of physiologic apparatus, electrical stimuli and methods of experimentation; the demonstration of experiments which illustrate physiologic function in the muscular, nervous, vascular, respiratory and glandular systems. Three hours a week, second semester, second year. Open to those who have completed course iv. PROF. BEARD AND DR. WILCOX.

Course·VI. Practical dietetics. (Elective.)

Lectures and laboratory exercises. A study of food analysis, food preparation and of the general principles of food selection, including a discussion of invalid and infant dietary. Two hours a week, first semester, fourth year.
PROFESSOR BEARD AND MISS WILKINSON.

Opportunity will be afforded, in the laboratories of physiology and physiologic chemistry, for the pursuit of special courses of study, in both experimental and chemical physiology, under the direction of the chair.

Full courses in animal biology in the college of science, literature and the arts will be accepted in lieu of first year physiology in the department of medicine.

See statement of fees, page 18.

CHEMISTRY.

The work in this subfect is carried on in a building especially arranged for this work. The qualitative laboratory has a floor space of about 2300 square feet and accomodates 100 students at a time. It is used for instruction in general chemistry and analysis. It is well supplied with the usual apparatus. The quantitative laboratory has a floor space of about 1500 feet, and accomodates 68 students at one time. It is used for instruction in the analysis of the urine, quantative analysis and organic chemistry.

Course I. General inorganic chemistry, including qualitative analysis.

Lectures and recitations. 3 hours a week, first semester; 2 hours a week, second semester, first year. PROFESSOR BELL.

Laboratory work; qualitative analysis. 6 hours a week, first year, from October 1st to May 8th. PROFESSORS BELL AND CAREL.

Course II. Analysis of the urine; toxicology: chemistry of carbon compounds.

Lectures and recitations. 1 hour a week, first semester; 2 hours a week, second semester, second year. PROFESSOR BELL.

Laboratory work; analysis of the urine. 6 hours a week, second year, from October 1st to January 1st. PROFESSORS BELL AND CAREL.

Courses I, II and III in chemistry, in the school of technical and applied chemistry, are accepted in place of first year chemistry in the department of medicine.

See statement of fees, page 18.

An optional course in experimental work is given during the second semester of the second year.

It includes work in toxicology, water analysis, food analysis, and the preparation of carbon compounds, according to the wishes and needs of the individual student.

No charge is made except for apparatus destroyed.

MATERIA MEDICA AND THERAPEUTICS.

The work in materia medica and therapeutics is graded to cover a period of three years. It consists of lectures, recitations and demonstrations, conducted in the laboratory of materia medica. This laboratory is in Medical Hall. It is supplied with crude drugs and botanical specimens. Samples of these the student is allowed to retain for private study. Pharmaceutical preparations are also placed before him and he is taught the method of their manufacture and their most eligible forms.

Course I. Pharmacology.

This course includes the study of the general characteristics of drugs and of their physiologic actions. Lectures, recitations and laboratory work. 3 hours a week, second year. PROFESSOR BRACKEN.

Course II. Therapeutics.

In this course drugs are studied in groups, as governed by their physiologic action, and the therapeutic features of such groups are described. Other remedial measures than those depending upon drugs, such as hydro-therapy, serum-therapy, dietetics. etc., are fully considered. Lectures and recitations. 2 hours a week, third year. PROFESSOR BRACKEN

Course III. Therapeutics, elective.

In this course the treatment of individual diseases is studied and the application of therapeutic agents to them is discussed. Clinical instruction in therapeutics, conducted at St. Barnabas and Asbury hospitals, is added to the work of the classroom. Lectures and clinics. 2 hours a week, fourth year. PROFESSOR BRACKEN.

PATHOLOGY AND BACTERIOLOGY.

The laboratories of pathology and bacteriology occupy spacious quarters in the laboratory of medical sciences. A general laboratory, 44x70 feet, is well lighted by windows on three sides and part of the fourth. Electric light for microscopic and general illuminating purposes is also provided. The arrangement is such that four students are grouped so as to have a sink, with gas and electric light, distilled and city water and waste connection, and ample desk space next the windows. Eight lockers, arranged beneath the table and on the walls, provide for apparatus, microscopes, etc., and are given at the beginning of the course to each student. Immediately behind and accessible to each student, are sterilizers, incubators, blow-pipes, etc. Cupboards, drawers, a large incubator, sinks, fume chambers, demonstration and distribution tables, complete the arrangement of the room.

Two private rooms of the demonstrators flank it on either side. Adjoining one of these are the department library and the office and private laboratory of the professor of pathology and bacteriology. Adjoining this is the private laboratory of the professor of surgical and clinical pathology. Specimens illustrative of surgical pathology are here prepared and diagnostic work done.

In the basement of the building, the department has store rooms and a room where pathological animals are housed. Here too are equipped laboratories for research in bacteriology and experimental pathology, as well as a room in which all the culture media are made.

In the third story, immediately above and of the same size as the large laboratory, is a museum for the storage and exhibition of pathological specimens, while a preparation room for their reception and assorting adjoins it.

The hospitals of Minneapolis and St. Paul afford a large supply of material and frequent opportunities for post-mortem examinations.

MICROSCOPES.

An adequate equipment of microscopes with attachments, immersion lenses, etc., permits of the rental of an instrument to each student, at a cost of $2.00 per semester, whenever he is unprovided with one suitable for his purposes.

Course I. (a) Bacteriology.

Lectures and demonstrations. This subject will be treated not only from the aspect of pathology, but in its relation to hygiene and public health. The general scope of bacteriology, the classification of the various bacterial forms, the composition and manufacture of culture media, the methods of isolation and culture, the testing of various bactericidal materials, conditions, etc., will be studied until a thorough knowledge of technique is acquired, (so far as may be possible with non-pathogenic bacteria). The special study and comparison of the various pathogenic micro-organisms will then be systematically taken up. 2 hours per week, first semester, third year.

PROFESSORS WESBROOK AND WHITE AND DR. WILSON.

(*b*) *Bacteriology*. Laboratory work, teaching the general principles of and familiarization with the making of culture media, the methods of culture isolation and the microscopic examination of stained and living bacteria, the testing of various antiseptics, etc.

The student will be required to cultivate in the various media, for macroscopic and microscopic examination, all the important pathogenic bacteria, such as the pyogenic bacteria, B. anthracis, B. typhi abdominalis, B. coli communis, Vibro choleræ, B. diphtheriae, B. tuberculosis, etc. Materials and tissues from men and animals, containing these and other bacteria, will be provided for diagnosis and the isolation of the bacteria in pure culture, where practicable. Parallel study of micro-organisms which might be mistaken for these, will also be pursued. Bacteriological diagnosis, in its relation to clinical diagnosis and public health, will be especially dwelt upon. 9 hours a week, for the first twelve weeks of the first semester, third year. PROFESSORS WESBROOK AND WHITE AND DR. WILSON.

Course II. (*a*) *General pathology.*

Lectures, demonstrations and laboratory work on the general processes involved in disease. Bacteriology and its etiological relation is taught concurrently (see above). The general considerations of tumors will be omitted, since it is fully dealt with in the course on surgical pathology and special pathology. 2 hours a week, first semester, third year.

(*b*) *General pathology.*

Laboratory work, particularly on the history of inflammation, (largely experimental) degenerations, etc. Nine hours a week for four weeks at the end of the first semester, third year. PROFESSORS WESBROOK AND WHITE AND DR. WILSON.

Course III. (*a*) *Special pathology.*

Lectures and demonstrations. The special study of the pathological processes occurring in the blood, vascular and lymphatic systems, lungs, liver, kidneys, alimentary canal, etc., will be taught by the demonstrations of fresh tissues and preserved specimens from the pathological museum. Three hours a week, second semester, third year. PROFESSORS WESBROOK AND WHITE.

(*b*) *Special pathology*. Practical laboratory work, in which the students will be required to mount and examine, under the microscope, selected, fresh and stained specimens of morbid tissues, fluids, etc. The microscopic and chemical study of such materials as pathological blood, sputum, urine, contents of alimentary canal, etc., and the application of laboratory methods to clinical diagnosis will form an important part of this work and will be taken up at the completion of the study of the morbid condition in each organ or system. The animal parasites will also receive attention. The histology of the various tumors will be fully given and students will be provided with specimens for staining, mounting and examination. Nine hours a week, second semester, third year.

PROFESSORS WESBROOK AND WHITE, DRS. HEAD AND WILSON.

(*c*) *Special pathology*. Autopsies and post-mortem technique. Students will have an opportunity of personally taking part in this work, under the direction of the pathologist in charge, in the hospitals of Minneapolis and St. Paul. A knowledge of the technique of post-mortem work and of morbid anatomy will be thus afforded. Throughout the third and fourth years.

PROFESSOR WHITE AND DR. ROTHROCK.

Course IV. Surgical pathology.

(See principles of surgery). This course will consist of lectures and laboratory demonstrations and will cover the general subject of the pathological and bacteriological basis of surgery. The lectures will be illustrated by charts and diagrams, by fresh and preserved specimens and, so far as practicable, demonstrations will be given of the various processes and of the bacteria concerned. Especial attention will be given to inflammation and its complications, to the infectious diseases of surgical importance and to tumors. 2 hours a week, first semester, third year, and 2 hours a week, second semester, fourth year. PROFESSOR STEWART.

PRACTICE OF MEDICINE.

The course in the principles and practice of medicine is graded in the third and fourth years. Examinations are held at the close of each of these years. The lectures and recitations are conducted by several members of the teaching staff and the dispensary and bedside clinics by a large corps of instructors.

Course I. Infectious diseases and the phenomena of injection.
Parasites; intoxicants; ptomaines. Lectures and recitations. 1 hour a week, third year. PROFESSOR HUNTER.

Course II. Local diseases; the thoracic viscera; heart; lungs and blood vessels. Lectures and recitations. One hour a week, third year. PROFESSOR ABBOTT.

Courses III. Elementary case-taking. Four lectures and recitations. First semester, third year. PROFESSOR GREENE.

Course IV. Contagious and infectious diseases; nutritive results of infection; the relations of temperament and diathesis, the laws of heredity; medical statistics; the principles of nursing, and a minute study of the literature of the topics taken up. Lectures and recitations. One hour a week, fourth year. PROFESSOR HUNTER.

Course V. Diseases of nutrition, in general and in detail, including hæmatology, diabetes, rheumatism, gout, scurvy, lithœmia, Graves' and Hodgkins' diseases, etc. Lectures and recitations. One hour a week, fourth year. PROFESSOR GREENE.

Course VI. Diseases of the abdominal viscera; stomach; intestines, liver; kidneys; disorders of digestion; infant feeding and gastro-intestinal diseases in childhood; diseases of old age. Lectures and recitations. One hour a week, fourth year. PROFESSOR ABBOTT.

Course VII. Case-taking and examinations for life insurance. (*elective.*) Lectures and recitations. Two hours a week, for nine weeks, second semester, fourth year. PROFESSOR GREENE.

Course VIII. Clinical exercises in general medicine, consisting of clinical instruction to sections of the third and fourth year classes, in the dispensaries, by the bedside and in the amphitheatres of the several hospitals of St. Paul and Minneapolis, as follows:

(*a*) City Hospital, Minneapolis, two hours a week, both years. Professors J. W. Bell and H. L. Staples and C. Nothnagel.

(*b*) St. Barnabas' Hospital, Minneapolis, two hours a week, both years. Professor C H. Hunter and Dr. Geo. D. Head.

c) Asbury Hospital, Minneapolis, two hours a week, second semester, both years Professors J. W. Bell and C. Nothnagel.

(*d*) City and County Hospital, St. Paul; St. Joseph's Hospital and St. Luke's Hospital, St. Paul, three hours a week, both years. Professor E. J. Abbott.

(*e*) City and County Hospital, St. Paul, two hours a week, both years. Professor C. L. Greene and Drs. Senkler and Henderson.

(*f*) Free Dispensary, St. Paul, two hours a week, both years. Professor C. L. Greene and Drs. Senkler, Lando and Ramsey.

(*d*) University Free Dispensary, Minneapolis, four hours a week, both years. Professor H. L. Staples, Drs. L. A. Nippert and Dr. R. E. Cutts.

PHYSICAL DIAGNOSIS.

Course I. The thorax: its topography, methods of examination, applied to the normal and abnormal chest; diseases of the respiratory organs; their physical signs and differential diagnosis. PROFESSOR J. W. BELL.

Course II. The precordial region: its topography, methods of examination, applied to the normal and abnormal heart; diseases of circulatory organs; their physical signs and differential diagnosis. PROFESSOR J. W. BELL.

Course III. The abdomen: its topography, methods of examination under normal and abnormal conditions; diseases of this region; their physical signs and differential diagnosis. Lectures and recitations. One hour a week, third year.
PROFESSOR J. W. BELL.

Course IV. Clinical physical diagnosis.

Practical clinical instruction given to small sections of the classes. For this purpose the clinical material of the several hospitals and dispensaries in Minneapolis is utilized. Three hours a week, third year. PROFESSOR NOTHNAGEL.

Course V. Clinical physical diagnosis.

Practical clinical instruction given to small sections of the classes. For this purpose the clinical material of the several hospitals and dispensaries in Minneapolis is utilized. Two hours a week, both semesters, fourth year. PROFESSOR J. W. BELL.

Course VI. Clinical physical diagnosis, continued.

The clinical material of the hospitals and dispensaries of the city of St. Paul is utilized in the form of clinics. Two hours a week, fourth year.
PROFESSOR GREENE AND DR. G. E. SENKLER.

SURGERY.

The course in surgery is graded in the third and fourth years. Examinations are held at the close of each of these years. Lectures and recitations are given by the teaching staff in surgery and clinics at the dispensaries and hospitals of Minneapolis and St. Paul by a large corps of instructors.

Course I. The principles of surgery.

Inflammation; traumatic fevers; suppurations; acute inflammations of joints; ulceration; gangrene; thrombosis and embolism; septicœmia; pyæmia; erysipelas; tetanus; surgical tuberculosis; actineomycosis, anthrax and glanders. Lectures and recitations, two hours a week, first semester, third year. PROFESSOR STEWART.

Course II. Operative Surgery.

Lectures upon the principles of operative procedures; the preparation of patient, operator and operating rooms; the principles of asepsis, antisepsis and sterilization; anæsthesia and anæsthetics; hæmostasis, ligatures and sutures; dressings, bandages and the treatment of wounds. One hour a week, first semester, third year. PROFESSOR DUNSMOOR.

Course III. The practice of surgery.

Fractures and dislocations; injuries of joints; injuries and surgical diseases of the skin; of the lymphatics, blood vessels and nerves; of the tendons, fasciæ and bursæ; of the face, mouth, tongue, jaws, excepting the study of tumors and plastic surgery. Lectures and recitations. Two hours a week, second semester, third year. PROFESSOR DUNN.

Course IV. Practice of surgery.

Surgery of the head, neck, chest, back, breast, abdomen, including hernia, anus, rectum and urinary tract. Lectures and recitations. Two hours a week, first semester, fourth year. PROFESSOR DUNN.

Course V. Operative surgery.

An elective laboratory work, consisting of operations, performed by sections of the class, under the supervision of the instructors, upon the cadaver and upon animals. Three hours a week, first half of first semester, fourth year.
PROFESSOR DUNSMOOR AND DR. LAW.

Course VI. Orthopedic surgery; including diseases of bones, joints, synoviæ and bursæ, congenital and acquired deformities: dystrophies, with the principles of treatment. Lectures and recitations. Two hours a week, eight weeks, last semester, fourth year. PROFESSOR GILLETTE.

Course VII. Surgical pathology: Tumors.

A special course upon tumors, taking up the general pathology and the general principles of the treatment of tumors. Each variety of tumor is then discussed, together with its histology, life-history, diagnosis and treatment. The course is illustrated by charts and museum specimens. Lectures and recitations, two hours a week, second semester, fourth year. PROFESSOR STEWART.

Course VIII. Bandaging and dressings.

A practical course of instruction, by means of demonstrations and drill, under the supervision of the chair of operative surgery. Two hours a week for eight weeks, first semester, fourth year. PROFESSOR DUNSMOOR AND DR. LAW.

Course IX. Clinical surgery.

Courses of clinics at which operations, in the whole domain of surgery, are witnessed by the students of the third and fourth years. These clinics are held in the dispensaries and hospitals of the cities of Minneapolis and St. Paul, upon Thursdays and Saturdays throughout the year. The classes alternate at the two cities in their attendance upon these clinics. They are conducted as follows:

At the City and County Hospital, St. Joseph's Hospital, or St. Luke's Hospital, in St. Paul, weekly, by Professor C. A. Wheaton.

At the City and County Hospital, St. Joseph's Hospital, St. Luke's Hospital, or Free Dispensary, at St. Paul, with sections of the class weekly, by Dr. John T. Rogers, Dr. G. M. Coon and Professor A. J. Gillette.

At the City and County Hospital, or at St. Joseph's Hospital, or at St. Luke's Hospital, St. Paul, weekly, by Professor Justus Ohage.

At the Asbury Hospital, or the City Hospital, Minneapolis, weekly, by Professor F. A. Dunsmoor.

At St. Mary's Hospital, or the City Hospital, Minneapolis, weekly, by Professor J. H. Dunn.

At St. Barnabas' Hospital, or the City Hospital, Minneapolis, weekly, by Professor J. E. Moore. At the University Free Dispensary, by Drs. Dunsmoor, Law, Stewart, Mann and Davis.

OBSTETRICS.

The subject of obstetrics is taught by lectures, recitations and dēmonstrations upon the manikin; by illustrative drawings and by attendance upon cases of labor. The didactic work is done in the third year; the clinical study is had in the fourth year. The entire obstetric service of the City Hospital in St. Paul and a large part of the service of the Minneapolis City Hospital are at the disposal of the chair of obstetrics. Clinics are also held at other hospitals in St. Paul and Minneapolis.

Course I. The anatomy and physiology of the pelvic organs; the development of the embryo and appendages; pregnancy; symptoms and diseases; abortion; operative obstetrics; the complications of labor and its sequelae. Lectures and recitations. 2 hours a week until November 1st and from January 1st to the end of the year, third year. PROFESSOR CATES.

Course II. The theory and practice of obstetrics.
The mechanism and conduct of normal labor; operative obstetrics; the complications of labor and its sequelae. Lectures and recitations. 2 hours a week during November and December, third year. PROFESSOR RITCHIE.

Course III. Course of demonstrations, by charts and upon the manikin, associated with the course lectures.

Course IV Clinical obstetrics. The study of and participation in two or more deliveries, in the fourth year, under the personal direction of Professors Ritchie and Cates, Drs. H. W. Davis and Frederick Leavitt.

GYNECOLOGY.

The course in the diseases of women consists of lectures, recitations, clinical instruction and the witness of operations, upon the human subject, as they may offer,

Course I. Lectures and recitations.
Two hours a week, first semester, fourth year. PROFESSOR STONE.

Course II. Clinical course.
Observations and examinations of patients, methods of examination, diagnosis and treatment. Two operations at least, weekly, at which the student is required to assist. PROFESSORS A. W. ABBOTT AND A. MCLAREN.

Instruction is given at the University and St. Paul Free Dispensaries in methods of examination, diagnosis, use of instruments, etc.

OPHTHALMOLOGY AND OTOLOGY.

Course I. Diseases of the eye and its appendages.
Lectures and recitations. 1 hour a week, 16 weeks, fourth year.
PROFESSOR TODD.

Course II. Refraction and its errors. Diseases of the ear.
Lectures and recitations. 1 hour a week, 16 weeks, fourth year.
PROFESSOR FULTON.

Course III. Clinical lectures will be given and operations performed at St. Joseph's Hospital, St. Paul, every Saturday. Fourth year.

Clinical lectures will be given every Wednesday at the St. Paul City Hospital during the months of January, February and March, and occasionally clinics will be given at St. Luke's Hospital. Fourth year. PROFESSOR FULTON.

Course IV. Clinical lectures will be given and operations performed at Asbury Hospital, Minneapolis, every Thursday. Fourth year. PROFESSOR TODD.

Clinics will be given at the Minneapolis City Hospital occasionally during October, November, December and January. Fourth year. PROFESSOR TODD.

Course V. Clinical instruction will be given at the University Free Dispensary in the diagnosis of diseases of the eye and ear; in the methods of examination; in the use of instruments, including the ophthalmoscope, and in the application of remedies, etc. Fourth year. PROFESSORS FULTON AND TODD.

Other free dispensaries in St. Paul and Minneapolis are open daily in this branch, where students have the privilege of attendance.

NERVOUS AND MENTAL DISEASES.

The required courses of lectures and recitations in this department will be given in the fourth year. Instruction will be by recitations and the "case method." Elective courses in clinical neurology, psychiatry, medical electricity and neuropathology will be offered in the fourth year.

Course I. Neurology.
Lectures, recitations and demonstrations. 2 hours a week, 12 weeks, first semester, fourth year. PROFESSORS RIGGS AND JONES (Alternating.)

Course II. Psychiatry.
Lectures, recitations and demonstrations. 2 hours a week, 5 weeks, second semeseer, fourth year. PROFESSORS RIGGS AND JONES (Alternating.)

Course III. Electro-therapeutics, (elective.)
Fourth year. DR. A. W. DUNNING.

Course IV. Clinical neurology and psychiatry.
Fourth year. PROFESSORS RIGGS AND JONES.

Practical instruction will be given upon Thursdays and Saturdays, fourth year. Clinics will be conducted in St. Paul, by Professor Riggs, at the City and County Hospital, St. Luke's Hospital, St. Joseph's Hospital and the Free Dispensary; and at Minneapolis by Professor Jones, at the City Hospital, Asbury Hospital, St. Mary's Hospital and the University Free Dispensary.

Course V. Laboratory course, (elective.)
Fourth year. DR. L. B. WILSON.

DISEASES OF THE SKIN.

This subject is taught by lectures, recitations and clinical demonstrations.

Course I. The anatomy and physiology of the skin. Diseases of the skin and its appendages; venereal diseases. Two hours a week, second semester, fourth year.
PROFESSOR VANDER HORCK.

Course II. Clinical lectures, in connection with the dispensaries and hospitals of Minneapolis and St. Paul. Weekly in the fourth year.
PROFESSORS VANDER HORCK AND BURNSIDE FOSTER.

DISEASES OF THE NOSE AND THROAT.

Course I. Anatomy and physiology of the nose and throat; pathology. diagnosis and treatment.
Lectures and recitations. Two hours a week, eight weeks, fourth year.
PROFESSOR LATON.

Course II. Clinical instruction, given at the University Free Dispensary, in the diagnosis of diseases of the nose and throat; in the methods of examination; in the use of instruments, and in the application of remedies, etc. Five hours a week, both semesters, fourth year. PROFESSOR LATON.

Course III. Clinical instruction, given at the St. Paul Free dispensary, in the diagnosis of diseases of the nose and throat; in the methods of examination; in the practical use of instruments and application of remedies; and in the *applied anatomy* of the nose and throat, illustrated by *dry* and *wet* preparations. Two hours a week. PROFESSOR SCHADLE.

DISEASES OF CHILDREN.

Course I. Didactic lectures, arranged to cover, so far as possible, the general subject of pediatrics. A course, consisting of one lecture a week throughout the fourth year, beginning with a consideration of the special characteristics of the normal infant and child as distinguished from the adult and passing on to a detailed description of the features and management of the diseases peculiar to infancy and childhood and of the more or less specialized forms in which certain diseases common to all ages exist during the early years of life. These lectures will be suitably illustrated by charts, colored plates, specimens, and the occasional use of the stereopticon. PROFESSOR T. S. ROBERTS.

Course II. An auxiliary course of lectures will be given in this branch. to the students of the fourth year, at special hours to be announced in the future.
PROFESSOR J. T. CHRISTISON.

Course III. Clinical instruction will be given at the St. Paul Free Dispensary and the St. Paul City Hospital four hours weekly throughout the fourth year.

PROFESSOR J. T. CHRISTISON.

Course III. Clinical instruction will be given in Minneapolis at Barnabas' Hospital, the Children's Home, the University Free Dispensary and other specially designated places at such times as opportunity presents. Fourth year.

PROFESSOR T. S. ROBERTS.

HYGIENE.

A course of lectures in hygiene is conducted by a corps of the faculty. The general subject is thus divided into several branches, namely: chemistry of air, water and soil; the physiology of foods, beverages, clothing, bathing and exercise; public sanitation (including sewage and garbage disposal, applied and school disinfection, regulations of quarantine, the disposal of the dead, the devolopment of vital statistics, the care of slaughter houses, etc.,) the bacterial diagnosis of infectious diseases, and some practical phases of sanitary engineering. The examinations in this branch are conducted by the lecturers jointly. The course includes twenty lectures and recitations, which are given during the second semester of the fourth year. PPOFESSORS BELL, BEARD, WESBROOK AND BRACKEN.

MEDICAL JURISPRUDENCE.

An elective course of lectures and recitations, in the legal relations of medicine. Two hours a week, for eight weeks, fourth year. PROFESSOR SWEENEY.

THE HISTORY OF MEDICINE.

An elective course of lectures is given in the history of medicine and of the medical profession from the earliest times, including accounts of the epoch-making discoveries in medicine, brief sketches of the lives of eminent physicians and an account of the great plagues of history. Two hours a week, for eight weeks, fourth year. PROFESSOR BURNSIDE FOSTER.

MECHANO-THERAPY.

Courses of illustrated lecturers and clinical demonstrations in gymnastics and massage, dealing with the physiology of technique and therapeutics. The physiology, therapeutics and technique of hydro-therapy are also discussed. One hour a week, for twelve weeks, second semester, fourth year. DR. HALDOR SNEVE.

TEXT-BOOKS AND COLLATERAL READING.

The following text-books are preferred by the faculty. Reference works are suggested, also, for collateral reading:

Medical dictionaries;

Gould's Medical Dictionary.
Dunglison's Medical Dictionary.
Duane's Medical Dictionary.
Dorland's Medical Dictionary.

Histology.

First year—
  Wilson's The Cell.
  Piersol's Histology.
  Böhm-Davidoff-Huber's Histology.
  Stöhrs Histology.
  Quain's Anatomy, 10th Ed. Vol. I, Pt. II.
  Schæfer's Histology.
  Parker's Biology.

Second year.
  Piersol's Histology.
  Quain's Anatomy, Vol. III, Pts. I, III and IV.
Collateral reading—Kölliker's Gewebelehre Pts. I and II; Duval's Précis d' Histologie;

Ranvier's Traite d' Histologie; Weyesse's Histology; Behren's Kossel u Schiefferdecker's Gewebelehre; Klein's Histology; O. Hertwig's The Cell; Lee's Microtomist's Vade Mecum: Stirling's Practical Histology; Willey's Amphioxus, etc.; Thompson's Zoology; Huxley & Martin's Biology; Davenport's Experimental Morphology; Barker's Nervous System.

Embryology.

Minot's Embryology.
Hertwig-Mark's Embryology.
Marshall's Vertebrate Embryology.

Collateral reading—Koliker's Enllwicklungsgeschichte; Prenant's Embryologie; Schenk's Embryologie; O. Schultze's Embryologie; Heisler's Embryology.

Anatomy.

First year—
Morris' Text-book of Human Anatomy.
Quain's Anatomy, 10th edition, Vol. II, Pts. I and II.
Gray's Descriptive and Surgical Anatomy.
Gerrish's Anatomy.

Second and third years—
Quain's Anatomy, 10th edition.
Morris' Text-Book of Anatomy.
Gerrish's Anatomy.
Gray's Anatomy.
Spatschaltz' Atlas of Human Anatomy.
Holden's Practical Anatomy.
Erdmann's Manual of Dissections of the Human Body.
Weiss' Practical Anatomy.
Hayne's Manual of Anatomy.
Owen's Manual of Anatomy.
Treve's Applied Anatomy.

Collateral reading—Flower's Osteology of Mammals; Gegenbauer's Elements of Comparative Anatomy; Chauveau's Comparative Anatomy; Wiedersheim's Elements of Comparative Anatomy; McClellan's Regional Anatomy; Meynert's Psychiatry. Part I: anatomy, physiology and chemistry of the brain; Deaver's Surgical Anatomy; Edinger's Anatomy of the Nervous System; Hildebrand's Chirurgisch Topographise Anatomie.

Physiology.

First and second years—
Foster's Physiology, sixth edition.
Howell's American Text-Book of Physiology.
Stirling's Practical Physiology.
Waller's Human Physiology.

Collateral reading—Landois and Stirling's Handbook of Physiology; Chapman's Physiology; Stewart's Practical Physiology; Yeo's Physiology; Blyth's Foods.

Chemistry.

Second year.
Tyson's Examination of Urine.
Reese's Toxicology.

Materia medica and therapeutics.

Bracken's Outlines of Materia Medica and Pharmacology.

Collateral reading—The Pharmacopeia of the U. S.; The National Dispensary: Sayre's Organic Materia Medica and Pharmacognosy; Culbreth's Materia Medica and Pharmacology; Foster's Practical Therapeutics; Hare's System of Practical Therapeutics; Allen's Handbook of Local Therapeutics; Thompson's Practical Dietetics.

Pathology.

Ziegler's General and Special Pathology.

Stengel's Text-book of Pathology.

Coat's Manual of Pathology.

Mallory and Wright's Pathological Technique.

Collateral reading—Hamilton's Text-Book of Pathology; Delafield and Pruddens' Hand-book of Pathological Anatomy and Histology; Woodhead's Practical Pathology von Kahlden's Pathological Histology; Thoma's Text-Book of General Pathology; Lubarsch Ostertag, Ergebnisse der Pathologie u Anatomie, Orth, Pathologische Anatomie; Birch-Hirschfield, Pathologische Anatomie; Clifford Albutt's System of Medicine, Vol. I: Leukhart's die Thierische Parasiten des Menschen. Bouchard, Traite de Pathologie Generale; Eichorst, Pathologie u Therapie; Barlow's General Pathology.

Surgical Pathology.

Tillman's Principles of Surgery and Surgical Pathology.

Collateral reading—Park's Surgery, Vol. 1; Warren's Surgical Pathology; Senn on Tumors; Bowlby's Surgical Pathology; Nancrede's Lectures upon the Principles of Surgery; Watson Cheyne's Tuberculosis of Bones and Joints.

Clinical Microscopy.

Von Jaksch's Clinical Diagnosis.

Simon's Clinical Diagnosis.

Cabot's Clinical Examination of the Blood.

Cabot's Serum Diagnosis of Disease.

Collateral reading—Lenhartz Mikroscopie u Chemie am Krankenbett: von Limbeck Klinische Pathologie der Blutes; Rieder's Atlas der Mikroskopie des Harnes.

Bacteriology.

Muir and Richie's Manual of Bacteriology.

Abbott's Principles of Bacteriology.

Abbott, The Hygiene of Transmissible Diseases.

Park, Bacteriology in Medicine and Surgery.

Collateral reading—Sternberg's Manual of Bacteriology; Fraenkel's Bacteriology; Woodhead's Bacteria and their products; Duflocq, Lecons sur les Bacteries Pathogenes; Flügge, die Mikroorganismen; Lehmann and Neumann, Atlas u Grunnriss d, Bakteriologue u Lehrbuch d, spec. Bakt, Diagnostik; Migula, System de Bakterien; Duclaux, Traite de Microbiologie. Hueppe (Jordan) Principles of Bacteriology; Nory, Laboratory Work in Bacteriology.

Practice of Medicine.

Osler's Practice of Medicine.

Collateral reading—Allbutt's System of Medicine; Eichhorst's Internal Medicine. The College Library; Thompson's Practice of Medicine.

Case-taking and Life Insurance.

Greene: The Examination for Life Insurance and its Associated Clinical Methods.

Physical Diagnosis.

Flint's Auscultation and Percussion.

Musser's Medical Diagnosis.

Vierordt's Medical Diagnosis.

Collateral reading—Bramwell's Heart and Thoracic Aorta; Fox on the Lungs; Sansom's Heart and Aorta; Roger's Introduction to the Study of Medicine.

Surgery.

Park's Surgery.

Tillman's Principles of Surgery and Surgical Pathology.

Kocher's Operative Surgery.

Warren's Surgical Pathology and Therapeutics.

Senn's Principles of Surgery.

American Text-Book of Surgery.
Jacobson's or Zuckerkandl's Operative Surgery.
Robert's Modern Surgery.
Wharton and Curtiss' Practice of Surgery.

Collateral reading—International Text-Book of Surgery; Agnew's Practice of Surgery; Dennis' Practice of Surgery; Stimson's Fractures and Dislocations; Hamilton's Fractures and Dislocations.

Genito-urinary diseases.

Thomson's Diseases of Urinary Organs.

Collateral reading—Van Buren and Keys' Venereal Diseases; Bumstead and Taylor's Venereal Diseases.

Orthopaedia.

Moore's Orthopædic Surgery.
Bradford's and Lovett's Orthopædic Surgery.

Obstetrics.

Lusk, Hirst, Davis, Jewett and the American Text-Book of Obstetrics.

Gynecology.

Dudley's Diseases of Women.
Garrigue's Diseases of Women.
Byford's Diseases of Women.

Collateral reading—American System of Gynecology; Emmett's Diseases of Women; Thomas' and Munde's Gynecology.

Ophthalmology and Otology.

American Text-Book of Diseases of the Eye, Ear, Nose and Throat.
May's Diseases of the Eye.
De Schwienitz' Diseases of the Eye.
Swanzy's Diseases of the Eye.
Dench's Diseases of the Ear.
Politzer's Diseases of the Ear.

Collateral reading—Berry's Diseases of the Eye; Fuch's Diseases of the Eye; Howell's Diseases of the Ear and Naso-Pharynx; Norris and Oliver's Ophthalmology; Noyes' Diseases of the Eye.

Nervous and Mental Diseases.

Dana's Nervous Diseases.
Church and Peterson's Nervous and Mental Diseases.
Berkeley's Mental Diseases.

Collateral reading—Clouston's Lectures on Mental Diseases; Collin's Treatment of Nervous Diseases; Edinger's Anatomy of the Central Nervous System; Gordinier's. Anatomy of the Central Nervous System; Collin's Aphasia: Mills' Nervous Diseases

Diseases of Children.

Rotch's Pediatrics.
Holt's Diseases of Children.
American Text-Book of Diseases of Children.

Collateral reading—Osler's Practice of Medicine; Keating's Cyclopaedia of Diseases of Children.

Diseases of skin.

Hyde's Diseases of the Skin.
Jackson's Diseases of the Skin.
Taylor's Venereal Diseases.

Collateral reading—Crocker's Diseases of Skin; Morris' Diseases of the Skin; Hayden's Diseases of the Skin; Lydston's Genito-Urinary, Venereal and Sexual Diseases.

Diseases of Nose and Throat.

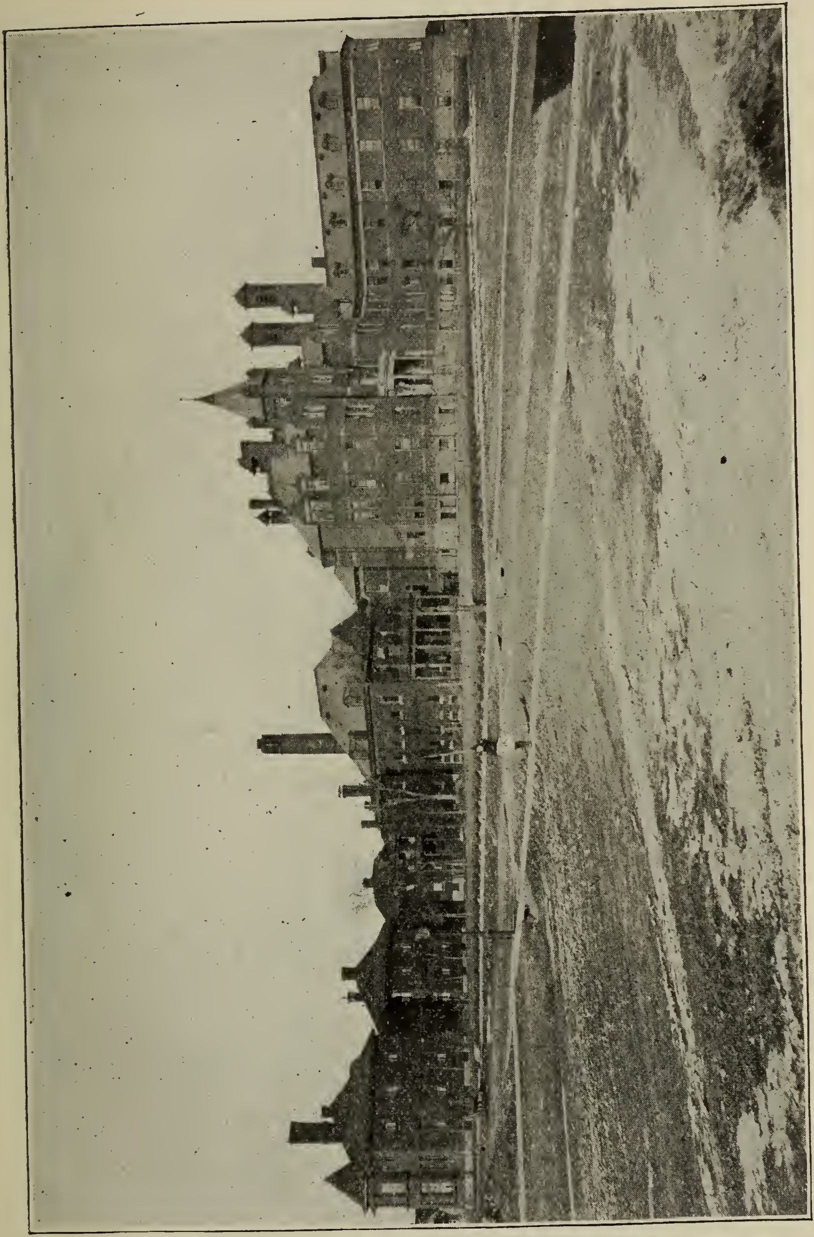
Shurley's Diseases of the Nose and Throat.
Ingall's Diseases of the Nose, Throat and Lungs.
Kyle's Diseases of the Nose and Throat.
Coakley's Diseases of the Nose and Throat.

Hygiene.

Coplin and Bevan's Practical Hygiene.
Park's Hygiene.
Collateral reading—Richardson's Preventive Medicine; Buck's Hygiene and Public Health.

Medical jurisprudence.

Taylor's Medical Jurisprudence.
Collateral reading—Hamilton's American System of Legal Medicine; Withaus' Principles of Forensic Medicine and Toxicology; Wharton and Stille's Medical Jurisprudence.



CITY AND COUNTY HOSPITAL, ST. PAUL.

DEGREES.

The degree of doctor of medicine is conferred by the Board of Regents upon students who are recommended, by vote of the faculty, for graduaation. Candidates for the degree must possess the following essential qualifications:

(1) Twenty-one years of age and upwards.

(2) Good moral character.

(3) A degree of preliminary education equivalent to that demanded by the examination for entrance to this college.

(4) Four full college years spent in the study of medicine; the fourth year, at least, in this University, and the remainder in this or other recognized colleges of medicine.

(5) Satisfactory examinations passed in all branches in accordance with the foregoing rules.

DISPENSARY AND HOSPITAL CLINICS.

DISPENSARIES.

The University free dispensary is located in the new clinical building. Several rooms are devoted to the reception of patients and to their examination and treatment. Its service is a growing one and is utilized for the teaching of the classes of the third and fourth years. The faculty and a corps of assistants manage the dispensary. Dispensaries at Asbury Hospital and the City Hospital are also open to the students of the University. They are largely attended by members of the faculty.

The St. Paul Free Dispensary is centrally situated and offers its clinics to the students of this college. It owns the building formerly used by the St. Paul Medical College—a twenty-room building, which has been equipped for its occupancy. It centralizes the clinical opportunities of St. Paul and its staff is, similarly, made up largely of faculty members.

HOSPITALS.

The hospitals of the cities of Minneapolis and St. Paul have very generously opened their doors to the students of this department. Saturday and Thursday mornings and afternoons, throughout the year, are devoted to the use of these clinical opportunities by the junior and senior classes. These classes alternate in periods of six weeks between the two cities upon the days mentioned.

THE CITY HOSPITAL, of Minneapolis, occupies spacious buildings and affords a large mass of clinical material which members of the faculty upon its staff are permitted to utilize during their terms of service.

ST. MARY'S HOSPITAL has a staff upon which this faculty is represented by four members. Its management has seconded the efforts of the staff to make the hospital useful to medical students by providing an amphitheatre of modern construction, in which seventy-five spectators can be accommodated. The hospital also opens its wards for the bedside study of disease. Surgical and medical clinics are held here upon the weekly clinic days.

St. Barnabas' Hospital has also generously equipped an amphitheatre, within which a class of fifty students can be gathered. Bedside instruction is given freely in its wards to the students of this college. Clinics are usually conducted in this amphitheatre on Saturdays. Its staff, also, numbers upon it six members of this faculty.

Asbury Methodist Hospital offers its clinical opportunities to the college. Wednesday and Saturday clinics are held in its wards and amphitheatre. Its service is, in part, manned by faculty members.

The City and County Hospital, of St. Paul, occupies a large building, of modern construction and generously equipped with clinical conveniences. Its management has spared neither effort nor means to make it a model of its class. It contains a large amphitheatre for teaching purposes. It enters some two thousand patients annually, a large proportion of whom are of the emergency order or suffer from acute forms of disease. This college is represented upon its staff by a majority of the members.

St. Joseph's Hospital has always contributed generously to the clinical advantages of the University. It contains a spacious amphitheatre, built and equipped for the students of this college. It has faculty members upon its staff who conduct weekly clinics in the hospital. Its service is large, its capacity being upwards of one hundred beds.

St. Luke's Hospital possesses all the most desirable features of modern hospital architecture and has a large clinical service. It is furnished with an amphitheatre for the benefit of students and has a thoroughly equipped operating room, in which clinics are frequently conducted.

MINNEAPOLIS CLINICS.

1901-1902.

THURSDAY.

9-10:30	Medicine	Prof. Bell	½ Class.	City Hospital
10:30-12	Medicine	Prof. Nothnagel	½ Class.	City Hospital
9-11	Gynecology	Prof. Abbott	½ Class.	St. Barn. and City Hos.
11:12	Eye and Ear	Prof. Todd	½ Class.	Asbury Hospital.

NOON RECESS.

1-2	Laryngology	Prof. Laton	Sections.	Clinical Building.
1-2	Medicine	Prof. Nothnagel and Dr. Nippert	Sections.	Clinical Building.
1-2	Gynecology	Prof. Abbott and Drs. Benjamin and Cutts.	Sections.	Clinical Building.
1-2	Surgery	Prof. Moore and Dr. Wright.	Sections.	Clinical Building.
1-2	Eye and Ear	Prof. Todd and Drs. Reamer and Litzenberg	Sections. Sections.	Clinical Building. Clinical Building.
1-2	Dermatology	Prof. Vander Horck and Dr. Burgan	Sections.	Clinical Building.
1-2	Nervous Diseases	Prof. Jones	Sections.	Clinical Building.
1-2	Children	Prof. Roberts		
2-3	Nervous Diseases	Prof. Jones	Class	City Hospital.
3-4	Dermatology	Prof. Vander Horck	Class	City Hospital.
4-6	Autopsies	Prof. Stewart	Sections.	City Hospital.

SATURDAY.

9-11	Surgery	Prof. Dunsmoor	½ Class.	Asbury Hospital.
9-11	Surgery	Prof. Moore	½ Class.	St. Barn. and City Hos.
11-12	Surgery	Prof. Dunn	½ Class.	St Mary's and City Hos.
11-12	Children	Prof. Roberts.	½ Class.	City Hospital.

NOON RECESS.

1-2:30	Medicine	Prof. Hunter	½ Class.	St. Barnabas Hospital.
1-2:30	Medicine	Prof. Staples	½ Class.	City Hospital.
2:30-4	Medicine	Dr. Head	Sections.	City Hospital.
4-6	Autopsies	Prof. Stewart	Sections.	City Hospital.

Clinical Building open daily from 12 to 2 for seniors, and for juniors at the same hour on their Thursday clinic in Minneapolis.

Obstetric clinics throughout the year by Prof. Cates and Dr. Cutts at City Hospital and Clinic Building.

ST. PAUL CLINICS.

1901-1902.

THURSDAY.

8:30-9:30.	Orthopedia	Prof. Gillette	Class	St. Luke's or City Hos.
10-12	Surgery	Prof. Ohage Dr. Rogers	½ Class	St. Luke's, St. Joseph's or City Hospital.
	Gynecology	Prof. McLaren	½ Class	

NOON RECESS.

1:30-2:30	Medicine	Dr. Senkler	2 Sectio's	Dispensary.
	Medicine	Dr. Henderson	2 “	Dispensary.
	Surgery	Dr. Warren Dennis	Section	Dispensary.
		Dr. H. P. Ritchie	“	Dispensary.
	Eye and Ear	Prof. Fulton	“	Dispensary.
	Nose and Throat	Prof. Schadle	“	Dispensary.
	Nervous Diseases	Dr. Dunning	“	Dispensary.
2:30-3:30	Medicine	Prof. Greene	Class	Dispensary.
4:00-5:30	Medicine	Prof. Abbott	Section	City Hospital.
	Dis. of Children	Dr. Christison	“	City Hospital.
	Medicine	Dr. Senkler	“	City Hospital.
	Medicine	Dr. Henderson	“	City Hospital.
	Pathological Anat.	Dr. Rothrock	“	City Hospital.

SATURDAY.

8:30-9:30	Nervous Diseases	Prof. Riggs	Class	Free Dispensary.
10-12	Surgery	Prof. Wheaton	Class	City Hospital.

NOON RECESS.

1:30-2:30	Medicine:	Prof. Greene	Section	Dispensary.
	Medicine	Dr. Senkler	“	Dispensary.
	Medicine	Dr. Henderson	“	Dispensary.
	Nose and Throat	Prof. Schadle:	“	Dispensary.
	Eye and Ear	Prof. Fulton	“	Dispensary.
	Nervous Diseases.	Dr. Dunning	“	Dispensary.
	Skin and Venereal.	Prof. Foster	“	Dispensary.
	Genito-Urinary	Dr. Coon	“	Dispensary.
3:00-4:00	Medicine	Prof. Abbott	Class	City Hospital.
4:00-5:00	Medicine	Prof. Abbott	Sections	City Hospital.
	Dis. of Children	Dr. Christison	“	City Hospital.
	Medicine	Dr. Senkler	“	City Hospital.
	Medicine	Dr. Henderson	“	City Hospital.
	Pathological Anat.	Dr. Rothrock	“	City Hospital.

HOSPITAL APPOINTMENTS.

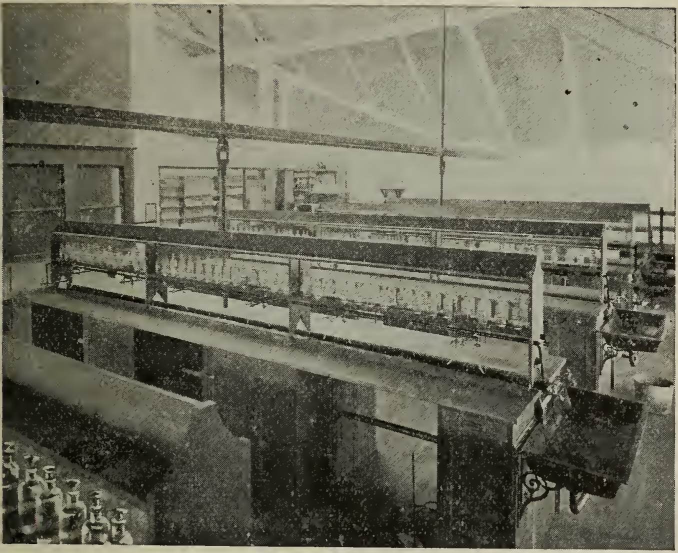
Upwards of twenty hospital positions are open to graduates of this college. Most of these positions are secured through competitive examinations. Graduates of this college often receive appointments as resident physicians in the hospitals for the insane of this and adjoining states. A few appointments are awarded to undergraduates, by means of competitive examination.

ALUMNI ASSOCIATION.

The annual meeting of the alumni association of the college of medicine and surgery will occur at 8 p. m. on Alumni Day, June 4th, 1902, in Medical Hall. The association may be addressed through its secretary, Dr. C. A. Erdmann. The alumni of this college are requested to send their names and addresses to the secretary.

CORRESPONDENCE.

N. B.—All correspondence relating to this college should be addressed to Dr. Parks Ritchie, Dean, College of Medicine and Surgery, University of Minnesota, Minneapolis.



Laboratory of Physiologic Chemistry

Anatomical Building.

The Department of Medicine.

COLLEGE OF MEDICINE AND SURGERY.

GRADUATE STUDENTS, 7.

G. W. Boot, *M. D.*
C. D. Buck, *M. D.*
C. Carlan, *M. D.*
James P. Davis, *M. D.*
George Eitel, *M. D.*
W. E. Rocheford, *M. D.*
F. C. Todd, *M. D.*

FOURTH YEAR, 66.

Adams, Bertram Sage, *B. S.*, '98, Lisbon. N. D.
Argue, George William, Breckenridge.
Armstrong, John Milton, Minneapolis.
Aurand, William Henry, Bowdle, S.D.
Baldwin, William Prendergast, Mich. City, N. D.
Beckman, Emil Hessel, Minneapolis.
Benedict, Erle Edson, Minneapolis.
Blackman, Ernest Linwood, Alden.
Black, James Minneapolis.
Campbell, John Elisha, *M.S.*, Minneapolis
Carman, James Edwin. Minneapolis.
Cassel, Rufus Joshua, Dassel.
—Cater, Getta M., Muskegon, Mich.
Chamberlin, Henry Ward, La Crosse, Wis.
Chowning, William, Minneapolis.
Cleveland, Hiram Edward. Northfield.
Cohen, Harry Archibald, Minneapolis.
Cowles, Danforth Chaucer, Minneapolis.
Dart, Leslie O , Litchfield.
Davis. Luther Alvin, Bertram.
Day, Floyd McArthur, Preston.
Dickman, Lester Albert, Westgate.
Donovan, John Joseph, Minneapolis.
Doyle, John Willis, Minneapolis.
Eberlin, Edward August, Blue Earth City.
Eisengræber, Gustav Adolph, Jerichow, Germany.
Evans, Owen, LaCrosse, Wis.
Ewing, C. Francis. Angola, Ind.
Farmer, Sidney Stewart. Owatonna.
Farrish, Robert Cyrus, St. Paul.
Ferguson, James Corey, Olivia.
Fligman, Louis H., Helena, Mont.
Foster, Alson James, St. Paul.
Hanson, Martin O., Lemond.
Holst, Claude Frederick, Red Wing.
—Hopkins, Mary Parker, St. Paul.
Houston, Charles Alexander, Kasson.
Johnson, Herman M., Pelican Rapids.
Jones, Herbert William, Berlin, Wis.
Kiehle, Frederick Andrews, *B. A.*, M'p'l's.
Koren, Finn, *B, A.*, '98, Montevideo.
La Rose, Victor Joseph, St. Paul.
Lees, Robert Bruce, Minneapolis.
Levinson, Archibald Ezekiel. Minneapolis.
Loberg, Adolph Edward, Minneapolis.
Maloney, Thomas James, St. Paul.
McCloud, Charles Naumann, St. Paul.
McGuigan, Henry Thomas, Millville.
Mathisen, George B., Evansville.
Olsen, Sterling Herber, Austin.
Parker, Harvey Gamaliel, Waseca.
Prinzing, Jacob, St. Paul.
—Putnam, Catherine Eliza, St. Paul.
Rose, Frank, Minneapolis.
Sanford, James Alfred, Alderly, Wis.
Savage, Francis Joseph, Minneapolis.
Schneider, Henry A., Deerfield.
Stemsrud, Arne A., Madison.
Stierle, Adolph, Jr., St. Paul.
Stolpestad, Harold Lauritz, St. Paul.
Strout, George Elmer, Sebastapol, Cal.
Sweitzer, Samuel Edward, Minneapolis.
Truscott, Joseph Robert, Minneapolis.
—Vallely, Rose Viviana, Fairhaven.
Wells, H. Journeay, Minneapolis.
Whitacre, John Clifford, St. Paul.

THIRD YEAR, 73.

Alger, Edmund W., Minneapolis.
Arey, Hugh C., St. Paul.
—Barsness, Nellie O., Starbuck.
Baxter, Stephen H., Minneapolis.
Bennion, Percival H., Litchfield.
Bickford, Frank J., Maine.
Bissell, Frank S., Litchfield.
Bomberger, Franklin J., Minneapolis.
Brigham, Charles F., St. Cloud.
Brimhall, Silas J., San Diego, Cal.
Brown, Walter M., Minneapolis.
Brown, William G., Park River, N. D.
Budworth, Benjamin F., Minneapolis.
Bussen, Leonard H., Torah.
Cameron, John A., Hillsboro, N. D
Clement, Lucian O., Waseca.
Coulter, Charles F., New York Mills.
Cummings, John H., St. Paul.
Davis, Frederick U., Mankato.
Donovan, John J., Minneapolis.
Drechsler, Herman A., Stillwater.
Eckman, Albert, Cokato.
Erb, Frederick A., Minneapolis.
Field, Merton, Bismark, N. D.
Fjelstad, Jacob C., Norway Lake.
Foster, Clyde C., Minneapolis.
Friedman. Aaron, Minneapolis.
Fulton, Thomas C., White Bear.
George, James W., Minneapolis.
Godfrey, Harvey B., Minneapolis.
—Goodman, Minerva, Minneapolis.
Guthrie, Charles E, Minneapolis.
Haugseth, Enoch, Minneapolis.
Heidekker, Arne A., Minneapolis.
—Hill, Elenor J., Minneapolis.
Iddings, Howard W., Grand Forks, N. D.
Ivers, Martin U., Minneapolis.
Jenson, J. Marius., Minneapolis.
Jenson, Charles A., Brighton.
Jewell, Emory L., Pine Island.
Johnson, William W., Bryson.
Judd, Edward S., Rochester.
Kittelson, Theodore, Canby.
Koch, John C., Fergus Falls.
Lamb, Harold, Sauk Center.
Larson, Frank E., Winthrop.
Lewis, William W., St. Paul.
Liedloff, Adolph G., Mankato.
Linneman, Nicholas J., Brainerd.
Lohrbauer, Ejner, Northwood N. D.
McCreery, Charles R., Northfield.
McCreery. William B., Northfield.
McDonald, Irving C., Buxton. N. D.
Meyerding, Edward A., St. Paul.
Millett, Josiah L., Graceville.
Norred, William A., Minneapolis.
Olson, Olof A., Dassel.
O'Malley, William P.,
Peabody, Percy D., Webster, S. D.
Peck, Lewellington D., Rochester.
—Ryan, Margaret, Minneapolis.
Schmidt, Walter R., Rochester.
Seashore, David E., Pilot Mound, Ia.
Seashore, Gilbert, Pilot Mound, Ia.
Shaleen, Arthur W., Lindstrom.
Stewart, Malcolm A., Flora, N. D.
Tanner, Andrew F., Minneapolis.
Thelen, William P., Stillwater.
Thoraldsen, Thorfin, Minneapolis.
Vinje, Syver, Dalton.
Vistaunet. Peter L, Fargo. N. D.
Wilcox, Van H., Spokane, Wash.
Wolner, Oscar H., St. Paul.

SECOND YEAR, 91.

Anderson, William S., Houston.
Axilrod, David L., Cumberland, Wis.
Baillee, William F., Barnesville.
Bevans, Theodore F., St. Paul.
Bockman, Michael, Minneapolis.
Bordwell, Frederick A., Stillwater.
Braasch, William F., Minneapolis.
Butler, John Jr., Minneapolis.
Call, Alfred M., Knox, N. D.
Campbell Eugene P., St. Paul.
Carpenter, Dwight J., Westfield, Wis.
Catlin, John J., Delano.
Chilton, Leo W., Fargo, N. D.
Churchill, James P., Minneapolis.
Clark, Robert, Elysian.
Clarkson, Paul G., Duluth.
Cook. Frederick, Prescott, Wis.
Coon, William F., Eau Claire, Wis.
Coulter, Herbert, Ioamosa, Cal.
Dahl, Jacob O., St. Paul.
Davis, Frank W., Taopi.
Deslauriers, August A., St. Paul.
Desmond, Michael A., Rushford.
Devine, John L., St. Paul.
Doe, Le Roy, Fargo, N. D.
Daugherty, Edwin B., Duluth.
Daugherty, Louis E., Duluth.
Dumas, Delbert F., Minneapolis.
Ellis, Burton.
Fitzgerald, Don F., Minneapolis.
Fowler, Paul H., Rochester.
French, Ernest A., Plainview.

3 0112 105845660

—Fullerton, Ellen, Minneapolis.
Gray, Clyde, Minneapolis.
Green, Eugene K., Brooklin Center.
Hagaman, George K., No. St. Paul.
—Harden, Kate C., Minneapolis.
Hart, Alfred B., Minneapolis.
—Hebard, Sue, Mondovi, Wis.
Higgins, John H., Minneapolis.
Hovde, Anders G., Kenyon.
Hubbard, Frederick G., St. Paul.
Irvine, Harry G., Minneapolis.
Jelstrup, Christian B., Minneapolis.
Jensen, James C., Spring Grove.
Johnson, Anders E., Minneapolis.
Juliar, Richard O., St. Clair.
Kaess, Andrew J., New Ulm.
Klove, Lewis, Dunbar, Ia.
Lenfest, John W., Anoka.
—Lindstrom, Josephine, Oberon, N. D.
Lupton, Ernest A., Minneapolis.
Lyman, Fred V., Caledonia.
McClure, John H., St Paul.
McCullagh, George, Cobourg, Ont.
McDonnell, William N., Detroit.
Magnusson, Herman E., Stark.
Makinson, Herbert A., Cedarville.
Mee, Patrick, Gaylord.
Melby, Benedik, Merrillon, Wis.
Mueller, George F., La Crosse, Wis.
Munns, John F., Minneapolis.
Newgord, Julius G., Minneapolis.
Nicholson, Joseph, Strout.
Nickerson, Bernard S., Minneapolis.
Noth, Henry W., Minneapolis.
Old, Herbert W., St. Paul.
Pettit, Charles W., Preston.
Phelan, Richard J., Lake Mills, Ia.
Revell, Aris L., Minneapolis.
Rice, George D., Adrian.
Robitshek, Emil C., Minneapolis.
Rowe, Olin W., Benton Harbor, Mich.
Russell, Clarence W., Augusta, Wis.
Schacht, Frederick E , Elizabeth.
Schalaben, Henry O., Madelia.
Schneider, John P., Rollingstone.
Schuldt, Fred C., Lakefield.
Shellman, John L., Fergus Falls.
Smith, Carsten C., Decorah, Ia.
Staley, John C., Bismark, N. D.
Stephenson, Robert B., Minneapolis.
Sterner, Otto.
Stimpson, Edward W., Newport, Ore.
Tilderquist, David L., Vasa.
Todd, Gilbert D., Minneapolis.
Voges, Adolph, St. Paul.
Wethall, Anton G., Stoughton, Wis.
Whipple. Clarence O., Rochester.
Wiger, Nicholas, River Falls, Wis.
—Wilkinson, Stella L.

FIRST YEAR, 93.

Abbott, John G., St. Paul.
Abbott, W. Pitt, Faribault.
Amundson, Orin C., Estherville. Ia.
Anderson, Arnt Gruntvig, Minneapolis.
Anderson, Walmer, Minneapolis.
Bartlett, Clayton Elmer, Wykoff.
Bessesen, Wm. Aaron, (Special) Albert Lea
Biederman, Jacob (Special), Stillwater.
Bigelow, Chas. Edward, Dodge Center.
—Bird, Amy, Osakis.
Birnberg, Tobias, St. Paul.
Blais, Charles, Minneapolis.
Boeckmann, Egil, St. Paul.
Bohland, Ernest H., St. Paul.
Brand, Wm. Algernon, Big Stone City, S. D.
Buckbee, Chas. Everets, Minneapolis.
Campbell, Lorne Alexander, Waka, Ont.
Campbell, Robert Wilson, Tracy.
Coffin, Samuel David, Lyndale.
Coria, Leon, Minneapolis.
Costello, Thos. James, Graceville
Crossette, George Dart, Minneapolis.
Dittman, George Claude, St. Paul.
Dix, George Edwin, Canby.
Drake, Chas. Ralph, Rushford.
Dunn, John T., Waseca.
Epley, Otis Hoyt, New Richmond, Wis.
Freeburg, Harry Milton, Charles City. Ia.
Freeman, Chas. Doney, St. Paul.
Frost, Wm. Stuart (Special), Willmar.
Gaard, Rasmus, Roland, Ia.
Gallagher, Patrick Joseph, Graceville.
Gallup, Glen Dean, Hudson, Wis.
Gates, C. Edson, Rochester.
Golseth, Gustave (Special), Ashby.
Gowenlock, Harry Joseph, Barnesville.
Graif, Alexander G , Lake Crystal.
Gronholm, John, Finland.
Gunz, Abe Nathan, Austin.
Hassman, Benjamin R., Hutchinson.
Higgins, Irving Wilbur, Hutchinson.
Hoffman, Walter Frederick, Minneapolis.
Hoffman, William Louis, Sioux Falls, S. D.
Humiston, Ray, Worthington.
Hutchinson, Henry John, High Rock, Lynn, Mass.